



SEQUENCE LISTING

<110> University of California
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Corr, Maripat
Rhee, Chae-Seo
Lorenzo, Leoni M.
Malini, Sen

<120> IMMUNOLOGIC COMPOSITIONS AND METHODS FOR
STUDYING AND TREATING CANCERS EXPRESSING FRIZZLED ANTIGENS

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18

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<212> DNA

<213> Artificial Sequence

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<223> G3PDH primer (reverse)

<400> 26

tacagcaaca ggggtggtgga

20

<210> 27

<211> 75

<212> PRT

<213> Artificial Sequence

<220>

<223> pFZD2-TT

<400> 27

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Thr	Thr	Ala	Pro	Pro	Pro	Gly	Leu	Gln	Pro	Gly	Ala	Gly	Gly	Thr	Pro
			20					25					30		
Gly	Gly	Pro	Gly	Gly	Gly	Gly	Ala	Pro	Pro	Arg	Tyr	Ala	Thr	Leu	Glu
			35				40					45			
His	Pro	Phe	His	Cys	Gly	Pro	Ser	Leu	Val	Asp	Asp	Ala	Leu	Ile	Asn
	50					55				60					
Ser	Thr	Lys	Ile	Tyr	Ser	Tyr	Phe	Pro	Ser	Val					
65					70					75					

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<211> 228

<212> DNA

<213> Artificial Sequence

<220>

<223> Coding region for pFZD2-TT

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ccgccgggac	tgcagccggg	tgccgggggc	accccggggtg	gcccggggcgg	cggcggcgct	120
ccccgcgcgt	acgccacgct	ggagcacccc	ttccactgcg	gccccagcct	ggtggacgac	180
gccctgatca	acagcaccaa	gatctacagc	tactttccca	gcgtgtag		228

<210> 29
 <211> 75
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> pTT-FZD2

<400> 29
 Met Val Asp Asp Ala Leu Ile Asn Ser Thr Lys Ile Tyr Ser Tyr Phe
 1 5 10 15
 Pro Ser Val Gly Pro Ser Leu Cys Val Gly Gln Asn His Ser Glu Asp
 20 25 30
 Gly Ala Pro Ala Leu Leu Thr Thr Ala Pro Pro Pro Gly Leu Gln Pro
 35 40 45
 Gly Ala Gly Gly Thr Pro Gly Gly Pro Gly Gly Gly Gly Ala Pro Pro
 50 55 60
 Arg Tyr Ala Thr Leu Glu His Pro Phe His Cys
 65 70 75

<210> 30
 <211> 228
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Coding region for pTT-FZD2

<400> 30
 atggtggacg acgccctgat caacagcacc aagatctaca gctactttcc cagcgtgggc 60
 cccagcctgt gcgtcggcca gaaccactcc gaggacggag ctcccgcgct actcaccacc 120
 gcgcgcgcgc cgggactgca gccgggtgcc gggggcaccc cgggtggccc gggcggcggc 180
 ggcgtcccc cgcgctacgc cacgctggag cacccttcc actgctag 228

<210> 31
 <211> 75
 <212> PRT
 <213> Artificial sequence

<220>
 <223> PFZD2-MMVF

<400> 31
 Met Cys Val Gly Gln Asn His Ser Glu Asp Gly Ala Pro Ala Leu Leu
 1 5 10 15
 Thr Thr Ala Pro Pro Gly Leu Gln Pro Gly Ala Gly Gly Thr Pro
 20 25 30
 Gly Gly Pro Gly Gly Gly Gly Ala Pro Pro Arg Tyr Ala Thr Leu Glu
 35 40 45
 His Pro Phe His Cys Gly Pro Ser Leu Lys Leu Leu Ser Leu Ile Lys
 50 55 60
 Gly Val Ile Val His Arg Leu Glu Gly Val Glu
 65 70 75

<210> 32
 <211> 228

<212> DNA
<213> Artificial Sequence

<220>
<223> Coding region for PFZD2-MMVF

<400> 32
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ccgccgggac tgcagccggg tgccgggggc accccgggtg gcccgggcgg cggcggcgct 120
ccccgcgcgt acgccacgct ggagcaccac ttccactgcg gcccagcct gaagctgctg 180
agcctgatca agggcgtgat cgtgcaccgc ctggaggggc tggagtag 228

<210> 33
<211> 75
<212> PRT
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<220>
<223> PMMVF-FZD2

<400> 33
Met Lys Leu Leu Ser Leu Ile Lys Gly Val Ile Val His Arg Leu Glu
1 5 10 15
Gly Val Glu Gly Pro Ser Leu Cys Val Gly Gln Asn His Ser Glu Asp
20 25 30
Gly Ala Pro Ala Leu Leu Thr Thr Ala Pro Pro Pro Gly Leu Gln Pro
35 40 45
Gly Ala Gly Gly Thr Pro Gly Gly Pro Gly Gly Gly Gly Ala Pro Pro
50 55 60
Arg Tyr Ala Thr Leu Glu His Pro Phe His Cys
65 70 75

<210> 34
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<212> DNA
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<223> Coding region for PMMVF-FZD2

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cccagcctgt gcgtcggcca gaaccactcc gaggacggag ctcccgcgct actcaccacc 120
gcgccgccgc cgggactgca gccgggtgcc gggggcaccc cgggtggccc gggcggcggc 180
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<210> 35
<211> 517
<212> PRT
<213> Mouse

<400> 35
Met Ala Val Ser Trp Ile Val Phe Asp Leu Trp Leu Leu Thr Val Phe
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Leu Gly Gln Ile Gly Gly His Ser Leu Phe Ser Cys Glu Pro Ile Thr
20 25 30
Leu Arg Met Cys Gln Asp Leu Pro Tyr Asn Thr Thr Phe Met Pro Asn

	35					40					45				
Leu	Leu	Asn	His	Tyr	Asp	Gln	Gln	Thr	Ala	Ala	Leu	Ala	Met	Glu	Pro
	50					55					60				
Phe	His	Pro	Met	Val	Asn	Leu	Asp	Cys	Ser	Arg	Asp	Phe	Arg	Pro	Phe
65					70					75				80	
Leu	Cys	Ala	Leu	Tyr	Ala	Pro	Ile	Cys	Met	Glu	Tyr	Gly	Arg	Val	Thr
				85					90					95	
Leu	Pro	Cys	Arg	Arg	Leu	Cys	Gln	Arg	Ala	Tyr	Ser	Glu	Cys	Ser	Lys
			100					105					110		
Leu	Met	Glu	Met	Phe	Gly	Val	Pro	Trp	Pro	Glu	Asp	Met	Glu	Cys	Ser
	115						120					125			
Arg	Phe	Pro	Asp	Cys	Asp	Glu	Pro	Tyr	Pro	Arg	Leu	Val	Asp	Leu	Asn
	130					135					140				
Leu	Val	Gly	Asp	Pro	Thr	Glu	Tyr	Ser	Phe	Leu	His	Val	Arg	Asp	Cys
145					150					155					160
Ser	Pro	Pro	Cys	Pro	Asn	Met	Tyr	Phe	Arg	Arg	Glu	Glu	Leu	Ser	Phe
				165					170					175	
Ala	Arg	Tyr	Phe	Ile	Gly	Leu	Ile	Ser	Ile	Ile	Cys	Leu	Ser	Ala	Thr
			180					185					190		
Leu	Phe	Thr	Phe	Leu	Thr	Phe	Leu	Ile	Asp	Val	Thr	Arg	Phe	Arg	Tyr
	195					200					205				
Pro	Glu	Arg	Pro	Ile	Ile	Phe	Tyr	Ala	Val	Cys	Tyr	Met	Met	Val	Ser
	210					215					220				
Leu	Ile	Phe	Phe	Ile	Gly	Phe	Leu	Leu	Glu	Asp	Arg	Val	Ala	Cys	Asn
225					230					235					240
Ala	Ser	Ser	Pro	Ala	Gln	Tyr	Lys	Ala	Ser	Thr	Val	Thr	Gln	Gly	Ser
				245					250					255	
His	Asn	Lys	Ala	Cys	Thr	Met	Leu	Phe	Met	Val	Leu	Tyr	Phe	Phe	Thr
			260					265					270		
Met	Ala	Gly	Ser	Val	Trp	Trp	Val	Ile	Leu	Thr	Ile	Thr	Trp	Phe	Leu
	275					280						285			
Ala	Ala	Val	Pro	Lys	Trp	Gly	Ser	Glu	Ala	Ile	Glu	Lys	Lys	Ala	Leu
	290					295					300				
Leu	Phe	His	Ala	Ser	Ala	Trp	Gly	Ile	Pro	Gly	Thr	Leu	Thr	Ile	Ile
305					310					315					320
Leu	Leu	Ala	Met	Asn	Lys	Ile	Glu	Gly	Asp	Asn	Ile	Ser	Gly	Val	Cys
				325					330					335	
Phe	Val	Gly	Leu	Tyr	Asp	Val	Asp	Ala	Leu	Arg	Tyr	Phe	Val	Leu	Ala
			340					345					350		
Pro	Leu	Cys	Leu	Tyr	Val	Val	Val	Gly	Val	Ser	Leu	Leu	Leu	Ala	Gly
	355					360					365				
Ile	Ile	Ser	Leu	Asn	Arg	Val	Arg	Ile	Glu	Ile	Pro	Leu	Glu	Lys	Glu
	370					375					380				
Asn	Gln	Asp	Lys	Leu	Val	Lys	Phe	Met	Ile	Arg	Ile	Gly	Val	Phe	Ser
385					390					395					400
Ile	Leu	Tyr	Leu	Val	Pro	Leu	Leu	Val	Val	Ile	Gly	Cys	Tyr	Phe	Tyr
				405					410					415	
Glu	Gln	Ala	Tyr	Arg	Gly	Ile	Trp	Glu	Thr	Thr	Trp	Ile	Gln	Glu	Arg
			420					425					430		
Cys	Arg	Glu	Tyr	His	Ile	Pro	Cys	Pro	Tyr	Gln	Val	Thr	Gln	Met	Ser
	435						440					445			
Arg	Pro	Asp	Leu	Ile	Leu	Phe	Leu	Met	Lys	Tyr	Leu	Met	Ala	Leu	Ile
	450					455					460				
Val	Gly	Ile	Pro	Ser	Ile	Phe	Trp	Val	Gly	Ser	Lys	Lys	Thr	Cys	Phe
465					470					475					480
Glu	Trp	Ala	Ser	Phe	Phe	His	Gly	Arg	Arg	Lys	Lys	Glu	Ile	Val	Asn
				485					490					495	

Glu Ser Arg Gln Val Leu Gln Glu Pro Asp Phe Ala Gln Ser Leu Leu
500 505 510
Arg Asp Pro Asn Thr
515

<210> 36
<211> 500
<212> PRT
<213> Mouse

<400> 36

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			20					25					30		
Pro	Thr	Leu	Gly	Phe	Gly	Asp	Glu	Glu	Glu	Arg	Arg	Cys	Asp	Pro	Ile
			35				40					45			
Arg	Ile	Ala	Met	Cys	Gln	Asn	Leu	Gly	Tyr	Asn	Val	Thr	Lys	Met	Pro
	50					55					60				
Asn	Leu	Val	Gly	His	Glu	Leu	Gln	Thr	Asp	Ala	Glu	Leu	Gln	Leu	Thr
65					70					75					80
Thr	Phe	Thr	Pro	Leu	Ile	Gln	Tyr	Gly	Cys	Ser	Ser	Gln	Leu	Gln	Phe
				85					90					95	
Phe	Leu	Cys	Ser	Val	Tyr	Val	Pro	Met	Cys	Thr	Glu	Lys	Ile	Asn	Ile
			100					105						110	
Pro	Ile	Gly	Pro	Cys	Gly	Gly	Met	Cys	Leu	Ser	Val	Lys	Arg	Arg	Cys
		115					120						125		
Glu	Pro	Val	Leu	Arg	Glu	Phe	Gly	Phe	Ala	Trp	Pro	Asp	Thr	Leu	Asn
	130					135					140				
Cys	Ser	Lys	Phe	Pro	Pro	Gln	Asn	Asp	His	Asn	His	Met	Cys	Met	Glu
145					150					155					160
Gly	Pro	Gly	Asp	Glu	Glu	Val	Pro	Leu	Pro	His	Lys	Thr	Pro	Leu	Asn
			165						170					175	
Cys	Val	Leu	Lys	Cys	Gly	Tyr	Asp	Ala	Gly	Leu	Tyr	Ser	Arg	Ser	Ala
			180					185					190		
Lys	Glu	Phe	Thr	Asp	Ile	Trp	Met	Ala	Val	Trp	Ala	Ser	Leu	Cys	Phe
	195						200					205			
Ile	Ser	Thr	Thr	Phe	Thr	Val	Leu	Thr	Phe	Leu	Ile	Asp	Ser	Ser	Arg
	210					215					220				
Phe	Ser	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Phe	Leu	Ser	Met	Cys	Tyr	Asn
225					230					235					240
Ile	Tyr	Ser	Ile	Ala	Tyr	Ile	Val	Arg	Leu	Thr	Val	Gly	Arg	Glu	Arg
				245					250					255	
Ile	Ser	Cys	Asp	Phe	Glu	Glu	Ala	Ala	Glu	Pro	Val	Leu	Ile	Gln	Glu
			260					265					270		
Gly	Leu	Lys	Asn	Thr	Gly	Cys	Ala	Ile	Ile	Phe	Leu	Leu	Met	Tyr	Phe
	275						280					285			
Phe	Gly	Met	Ala	Ser	Ser	Ile	Trp	Trp	Val	Ile	Leu	Thr	Leu	Thr	Trp
	290					295					300				
Phe	Leu	Ala	Ala	Gly	Leu	Lys	Trp	Gly	His	Glu	Ala	Ile	Glu	Met	His
305					310					315					320
Ser	Ser	Tyr	Phe	His	Ile	Ala	Ala	Trp	Ala	Ile	Pro	Ala	Val	Lys	Thr
				325					330					335	
Ile	Val	Ile	Leu	Ile	Met	Arg	Leu	Val	Asp	Ala	Asp	Glu	Leu	Thr	Gly
			340					345					350		
Leu	Cys	Tyr	Val	Gly	Asn	Gln	Asn	Leu	Asp	Ala	Leu	Thr	Gly	Phe	Val
			355				360						365		

Val Ala Pro Leu Phe Thr Tyr Leu Val Ile Gly Thr Leu Phe Ile Ala
 370 375 380
 Ala Gly Leu Val Ala Leu Phe Lys Ile Arg Ser Asn Leu Gln Lys Asp
 385 390 395 400
 Gly Thr Lys Thr Asp Lys Leu Glu Arg Leu Met Val Lys Ile Gly Val
 405 410 415
 Phe Ser Val Leu Tyr Thr Val Pro Ala Thr Cys Val Ile Ala Cys Tyr
 420 425 430
 Phe Tyr Glu Ile Ser Asn Trp Ala Leu Phe Arg Tyr Ser Ala Asp Asp
 435 440 445
 Ser Asn Met Ala Val Glu Met Leu Lys Ile Phe Met Ser Leu Leu Val
 450 455 460
 Gly Ile Thr Ser Gly Met Trp Ile Trp Ser Ala Lys Thr Leu His Thr
 465 470 475 480
 Trp Gln Lys Cys Ser Asn Arg Leu Val Asn Ser Gly Lys Val Lys Arg
 485 490 495
 Glu Lys Arg Gly
 500

<210> 37
 <211> 599
 <212> PRT
 <213> Mouse

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 Ala Val Leu Gln Arg Ser Ser Gly Ala Ala Ala Ser Ala Lys Glu
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 Leu Ala Cys Gln Glu Ile Thr Val Pro Leu Cys Lys Gly Ile Gly Tyr
 35 40 45
 Asn Tyr Thr Tyr Met Pro Asn Gln Phe Asn His Asp Thr Gln Asp Glu
 50 55 60
 Ala Gly Leu Glu Val His Gln Phe Trp Pro Leu Val Glu Ile Gln Cys
 65 70 75 80
 Ser Pro Asp Leu Lys Phe Phe Leu Cys Ser Met Tyr Thr Pro Ile Cys
 85 90 95
 Leu Glu Asp Tyr Lys Lys Pro Leu Pro Pro Cys Arg Ser Val Cys Glu
 100 105 110
 Arg Ala Lys Ala Gly Cys Ala Pro Leu Met Arg Gln Tyr Gly Phe Ala
 115 120 125
 Trp Pro Asp Arg Met Arg Cys Asp Arg Leu Pro Glu Gln Gly Asn Pro
 130 135 140
 Asp Thr Leu Cys Met Asp Tyr Asn Arg Thr Asp Leu Thr Thr Ala Ala
 145 150 155 160
 Pro Ser Pro Pro Arg Arg Leu Pro Pro Pro Pro Gly Glu Gln
 165 170 175
 Pro Pro Ser Gly Ser Gly His Ser Arg Pro Pro Gly Ala Arg Pro Pro
 180 185 190
 His Arg Gly Gly Ser Ser Arg Gly Ser Gly Asp Ala Ala Ala Pro
 195 200 205
 Pro Ser Arg Gly Gly Lys Thr Gly Gln Ile Ala Asn Cys Ala Leu Pro
 210 215 220
 Cys His Asn Pro Phe Phe Ser Gln Asp Glu Arg Ala Phe Thr Val Phe
 225 230 235 240
 Trp Ile Gly Leu Trp Ser Val Leu Cys Phe Val Ser Thr Phe Ala Thr
 245 250 255

Thr	His	Met	Pro	Asn	Gln	Phe	Asn	His	Asp	Thr	Gln	Asp	Glu	Ala	Gly
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Leu	Glu	Val	His	Gln	Phe	Trp	Pro	Leu	Val	Glu	Ile	Gln	Cys	Ser	Pro
65					70					75					80
Asp	Leu	Arg	Phe	Phe	Leu	Cys	Thr	Met	Tyr	Thr	Pro	Ile	Cys	Leu	Pro
				85					90					95	
Asp	Tyr	His	Lys	Pro	Leu	Pro	Pro	Cys	Arg	Ser	Val	Cys	Glu	Arg	Ala
			100					105					110		
Lys	Ala	Gly	Cys	Ser	Pro	Leu	Met	Arg	Gln	Tyr	Gly	Phe	Ala	Trp	Pro
		115					120					125			
Glu	Arg	Met	Ser	Cys	Asp	Arg	Leu	Pro	Val	Leu	Gly	Arg	Asp	Ala	Glu
		130				135					140				
Val	Leu	Cys	Met	Asp	Tyr	Asn	Arg	Ser	Glu	Ala	Thr	Thr	Ala	Pro	Pro
145				150						155					160
Arg	Pro	Phe	Pro	Ala	Lys	Pro	Thr	Leu	Pro	Gly	Pro	Pro	Gly	Ala	Pro
				165						170				175	
Ala	Ser	Gly	Gly	Arg	Thr	Gly	Gln	Val	Pro	Asn	Cys	Ala	Val	Pro	Cys
			180				185						190		
Tyr	Gln	Pro	Ser	Phe	Ser	Ala	Asp	Glu	Arg	Thr	Phe	Ala	Thr	Phe	Trp
		195					200					205			
Ile	Gly	Leu	Trp	Ser	Val	Leu	Cys	Phe	Ile	Ser	Thr	Ser	Thr	Thr	Val
		210				215					220				
Ala	Thr	Phe	Leu	Ile	Asp	Met	Asp	Thr	Phe	Arg	Tyr	Pro	Glu	Arg	Pro
225				230						235					240
Ile	Ile	Phe	Leu	Ser	Ala	Cys	Tyr	Leu	Cys	Val	Ser	Leu	Gly	Phe	Leu
				245					250					255	
Val	Arg	Leu	Val	Val	Gly	His	Ala	Ser	Val	Ala	Cys	Ser	Arg	Glu	His
			260					265					270		
Asn	His	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Ala	Leu	Cys	Thr	Ile	Val
		275					280					285			
Phe	Leu	Leu	Val	Tyr	Phe	Phe	Gly	Met	Ala	Ser	Ser	Ile	Trp	Trp	Val
		290				295					300				
Ile	Leu	Ser	Leu	Thr	Trp	Phe	Leu	Ala	Ala	Ala	Met	Lys	Trp	Gly	Asn
305				310						315					320
Glu	Ala	Ile	Ala	Gly	Tyr	Gly	Gln	Tyr	Phe	His	Leu	Ala	Ala	Trp	Leu
				325					330					335	
Ile	Pro	Ser	Val	Lys	Ser	Ile	Thr	Ala	Leu	Ala	Leu	Ser	Ser	Val	Asp
			340					345						350	
Gly	Asp	Pro	Val	Ala	Gly	Ile	Cys	Tyr	Val	Gly	Asn	Gln	Asn	Leu	Asn
		355					360					365			
Ser	Leu	Arg	Arg	Phe	Val	Leu	Gly	Pro	Leu	Val	Leu	Tyr	Leu	Leu	Val
		370				375					380				
Gly	Thr	Leu	Phe	Leu	Leu	Ala	Gly	Phe	Val	Ser	Leu	Phe	Arg	Ile	Arg
385				390						395					400
Ser	Val	Ile	Lys	Gln	Gly	Gly	Thr	Lys	Thr	Asp	Lys	Leu	Glu	Lys	Leu
			405						410					415	
Met	Ile	Arg	Ile	Gly	Ile	Phe	Thr	Leu	Leu	Tyr	Thr	Val	Pro	Ala	Ser
			420					425						430	
Ile	Val	Val	Ala	Cys	Tyr	Leu	Tyr	Glu	Gln	His	Tyr	Arg	Glu	Ser	Trp
			435				440					445			
Glu	Ala	Ala	Leu	Thr	Cys	Ala	Cys	Pro	Gly	His	Asp	Thr	Gly	Gln	Pro
		450				455					460				
Arg	Ala	Lys	Pro	Glu	Tyr	Trp	Val	Leu	Met	Leu	Lys	Tyr	Phe	Met	Cys
465				470						475					480
Leu	Val	Val	Gly	Ile	Thr	Ser	Gly	Val	Trp	Ile	Trp	Ser	Gly	Lys	Thr
			485					490						495	
Val	Glu	Ser	Trp	Arg	Arg	Phe	Thr	Ser	Arg	Cys	Cys	Cys	Arg	Pro	Arg

	500		505		510
Arg Gly His Lys					
515					
<210> 39					
<211> 533					
<212> PRT					
<213> Homo sapiens					
<400> 39					
Met Ala Val Ala Pro Leu Arg Gly Ala Leu Leu Leu Trp Gln Leu Leu					
1	5		10		15
Ala Ala Gly Gly Ala Ala Leu Glu Ile Gly Arg Phe Asp Pro Glu Arg					
	20		25		30
Gly Arg Gly Ala Ala Pro Cys Gln Ala Val Glu Ile Pro Met Cys Arg					
	35		40		45
Gly Ile Gly Tyr Asn Leu Thr Arg Met Pro Asn Leu Leu Gly His Thr					
	50		55		60
Ser Gln Gly Glu Ala Ala Ala Glu Leu Ala Glu Phe Ala Pro Leu Val					
65	70		75		80
Gln Tyr Gly Cys His Ser His Leu Arg Phe Phe Leu Cys Ser Leu Tyr					
	85		90		95
Ala Pro Met Cys Thr Asp Gln Val Ser Thr Pro Ile Pro Ala Cys Arg					
	100		105		110
Pro Met Cys Glu Gln Ala Arg Leu Arg Cys Ala Pro Ile Met Glu Gln					
	115		120		125
Phe Asn Phe Gly Trp Pro Asp Ser Leu Asp Cys Ala Arg Leu Pro Thr					
	130		135		140
Arg Asn Asp Pro His Ala Leu Cys Met Glu Ala Pro Glu Asn Ala Thr					
145	150		155		160
Ala Gly Pro Ala Glu Pro His Lys Gly Leu Gly Met Leu Pro Val Ala					
	165		170		175
Pro Arg Pro Ala Arg Pro Pro Gly Arg Ser Cys Ala Pro Arg Cys Gly					
	180		185		190
Pro Gly Val Glu Val Phe Trp Ser Arg Arg Asp Lys Asp Phe Ala Leu					
	195		200		205
Val Trp Met Ala Val Trp Ser Ala Leu Cys Phe Phe Ser Thr Ala Phe					
	210		215		220
Thr Val Leu Thr Phe Leu Leu Glu Pro His Arg Phe Gln Tyr Pro Glu					
225	230		235		240
Arg Pro Ile Ile Phe Leu Ser Met Cys Tyr Asn Val Tyr Ser Leu Ala					
	245		250		255
Phe Leu Ile Arg Ala Val Ala Gly Ala Gln Ser Val Ala Cys Asp Gln					
	260		265		270
Glu Ala Gly Ala Leu Tyr Val Ile Gln Glu Gly Leu Glu Asn Thr Gly					
	275		280		285
Cys Thr Leu Val Phe Leu Leu Tyr Tyr Phe Gly Met Ala Ser Ser					
	290		295		300
Leu Trp Trp Val Val Leu Thr Leu Thr Trp Phe Leu Ala Ala Gly Lys					
305	310		315		320
Lys Trp Gly His Glu Ala Ile Glu Ala His Gly Ser Tyr Phe His Met					
	325		330		335
Ala Ala Trp Gly Leu Pro Ala Leu Lys Thr Ile Val Ile Leu Thr Leu					
	340		345		350
Arg Lys Val Ala Gly Asp Glu Leu Thr Gly Leu Cys Tyr Val Ala Ser					
	355		360		365
Thr Asp Ala Ala Ala Leu Thr Gly Phe Val Leu Val Pro Leu Ser Gly					

370		375		380
Tyr Leu Val Leu Gly Ser Ser Phe Leu Leu Thr Gly Phe Val Ala Leu				
385		390		400
Phe His Ile Arg Lys Ile Met Lys Thr Gly Gly Thr Asn Thr Glu Lys				
	405		410	415
Leu Glu Lys Leu Met Val Lys Ile Gly Val Phe Ser Ile Leu Tyr Thr				
	420		425	430
Val Pro Ala Thr Cys Val Ile Val Cys Tyr Val Tyr Glu Arg Leu Asn				
	435		440	445
Met Asp Phe Trp Arg Leu Arg Ala Thr Glu Gln Pro Cys Ala Ala Ala				
	450		455	460
Ala Gly Pro Gly Gly Arg Arg Asp Cys Ser Leu Pro Gly Gly Ser Val				
465		470		480
Pro Thr Val Ala Val Phe Met Leu Lys Ile Phe Met Ser Leu Val Val				
	485		490	495
Gly Ile Thr Ser Gly Val Trp Val Trp Ser Ser Lys Thr Phe Gln Thr				
	500		505	510
Trp Gln Ser Leu Cys Tyr Arg Lys Ile Ala Ala Gly Arg Ala Arg Ala				
	515		520	525
Lys Ala Cys Arg Ala				
530				

<210> 40
 <211> 544
 <212> PRT
 <213> Rat

<400> 40

Leu Glu Ala Pro Leu Leu Gly Val Arg Ala Gln Pro Ala Gly Gln				
1	5	10	15	
Val Ser Gly Pro Gly Gln Gln Arg Pro Pro Pro Gln Pro Gln Gln				
	20	25	30	
Gly Gly Gln Gln Tyr Asn Gly Glu Arg Gly Ile Ser Ile Pro Asp His				
	35	40	45	
Gly Tyr Cys Gln Pro Ile Ser Ile Pro Leu Cys Thr Asp Ile Ala Tyr				
	50	55	60	
Asn Gln Thr Ile Met Pro Asn Leu Leu Gly His Thr Asn Gln Glu Asp				
65	70	75	80	
Ala Gly Leu Glu Val His Gln Phe Tyr Pro Leu Val Lys Val Gln Cys				
	85	90	95	
Ser Ala Glu Leu Lys Phe Phe Leu Cys Ser Met Tyr Ala Pro Val Cys				
	100	105	110	
Thr Val Leu Glu Gln Ala Leu Pro Pro Cys Arg Ser Leu Cys Glu Arg				
	115	120	125	
Ala Gln Gly Cys Glu Ala Leu Met Asn Lys Phe Gly Phe Gln Trp Pro				
	130	135	140	
Asp Thr Leu Lys Cys Glu Lys Phe Pro Val His Gly Ala Gly Glu Leu				
145	150	155	160	
Cys Val Gly Gln Asn Thr Ser Asp Lys Gly Thr Pro Thr Pro Ser Leu				
	165	170	175	
Leu Pro Glu Phe Trp Thr Ser Asn Pro Gln His Gly Leu Gly Glu Lys				
	180	185	190	
Asp Cys Gly Ala Pro Cys Glu Pro Thr Lys Val Tyr Gly Leu Met Tyr				
	195	200	205	
Phe Gly Pro Glu Glu Leu Arg Phe Ser Arg Thr Trp Ile Gly Ile Trp				
	210	215	220	
Ser Val Leu Cys Cys Ala Ser Thr Leu Phe Thr Val Leu Thr Tyr Leu				

225					230					235				240
Val	Asp	Met	Arg	Arg	Phe	Ser	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Phe
				245					250					255
Ser	Gly	Cys	Tyr	Thr	Ala	Val	Ala	Val	Ala	Tyr	Ile	Ala	Gly	Phe
			260					265					270	
Leu	Glu	Asp	Arg	Val	Val	Cys	Asn	Asp	Lys	Phe	Ala	Glu	Asp	Gly
		275					280					285		
Arg	Thr	Val	Ala	Gln	Gly	Thr	Lys	Lys	Glu	Gly	Cys	Thr	Ile	Leu
	290					295					300			
Met	Met	Leu	Tyr	Phe	Phe	Ser	Met	Ala	Ser	Ser	Ile	Trp	Trp	Val
305					310						315			320
Leu	Ser	Leu	Thr	Trp	Phe	Leu	Ala	Ala	Gly	Met	Lys	Trp	Gly	His
				325					330					335
Ala	Ile	Glu	Ala	Asn	Ser	Gln	Tyr	Phe	His	Leu	Ala	Ala	Trp	Ala
			340					345					350	
Pro	Ala	Ile	Lys	Thr	Ile	Thr	Ile	Leu	Ala	Leu	Gly	Gln	Val	Asp
	355						360					365		
Asp	Val	Leu	Ser	Gly	Val	Cys	Phe	Val	Gly	Leu	Asn	Asn	Val	Asp
	370				375						380			
Leu	Arg	Gly	Phe	Val	Leu	Ala	Pro	Leu	Phe	Val	Tyr	Leu	Phe	Ile
385					390					395				400
Thr	Ser	Phe	Leu	Leu	Ala	Gly	Phe	Val	Ser	Leu	Phe	Arg	Ile	Arg
				405					410				415	
Ile	Met	Lys	His	Asp	Gly	Thr	Lys	Thr	Glu	Lys	Leu	Glu	Lys	Leu
			420					425				430		
Val	Arg	Ile	Gly	Val	Phe	Ser	Val	Leu	Tyr	Thr	Val	Pro	Ala	Thr
	435						440					445		
Val	Ile	Ala	Cys	Tyr	Phe	Tyr	Glu	Gln	Ala	Phe	Arg	Asp	Gln	Trp
	450					455				460				
Arg	Ser	Trp	Val	Ala	Gln	Ser	Cys	Lys	Ser	Tyr	Ala	Ile	Pro	Cys
465					470					475				480
His	Leu	Gln	Gly	Gly	Gly	Gly	Val	Pro	Pro	His	Pro	Pro	Met	Ser
			485					490					495	
Asp	Phe	Thr	Val	Phe	Met	Ile	Lys	Tyr	Leu	Met	Thr	Leu	Ile	Val
		500						505				510		
Ile	Thr	Ser	Gly	Phe	Trp	Ile	Trp	Ser	Gly	Lys	Thr	Leu	Asn	Ser
	515					520					525			
Arg	Lys	Phe	Tyr	Thr	Arg	Leu	Thr	Asn	Ser	Lys	Gln	Gly	Glu	Thr
	530					535					540			

<210> 41
 <211> 529
 <212> PRT
 <213> Rat

<400> 41
 Met Arg Ala Arg Ser Ala Leu Pro Arg Ser Ala Leu Pro Arg Leu Leu
 1 5 10 15
 Leu Pro Leu Leu Leu Leu Pro Ala Ala Gly Pro Ala Gln Phe His Gly
 20 25 30
 Glu Lys Gly Ile Ser Ile Pro Asp His Gly Phe Cys Gln Pro Ile Ser
 35 40 45
 Ile Pro Leu Cys Thr Asp Ile Ala Tyr Asn Gln Thr Ile Met Pro Asn
 50 55 60
 Leu Leu Gly His Thr Asn Gln Glu Asp Ala Gly Leu Glu Val His Gln
 65 70 75 80
 Phe Tyr Pro Leu Val Lys Val Gln Cys Ser Pro Glu Leu Arg Phe Phe

				85					90				95				
Leu	Cys	Ser	Met	Tyr	Ala	Pro	Val	Cys	Thr	Val	Leu	Glu	Gln	Ala	Ile		
			100					105					110				
Pro	Pro	Cys	Arg	Ser	Ile	Cys	Glu	Arg	Ala	Arg	Gln	Gly	Cys	Glu	Ala		
		115					120					125					
Leu	Met	Asn	Lys	Phe	Gly	Phe	Gln	Trp	Pro	Glu	Arg	Leu	Arg	Cys	Glu		
	130					135					140						
His	Phe	Pro	Arg	His	Gly	Ala	Glu	Gln	Ile	Cys	Val	Gly	Gln	Asn	His		
145					150					155					160		
Ser	Glu	Asp	Gly	Thr	Pro	Ala	Leu	Leu	Thr	Thr	Ala	Pro	Pro	Ser	Gly		
			165						170					175			
Leu	Gln	Pro	Gly	Leu	Gly	Glu	Arg	Asp	Cys	Ala	Ala	Pro	Cys	Glu	Pro		
		180						185					190				
Ala	Arg	Pro	Asp	Gly	Ser	Met	Phe	Phe	Ser	His	His	His	Thr	Arg	Phe		
		195					200					205					
Ala	Arg	Leu	Trp	Ile	Leu	Thr	Trp	Ser	Val	Leu	Cys	Cys	Ala	Ser	Thr		
	210					215					220						
Phe	Phe	Thr	Val	Thr	Thr	Ser	Leu	Val	Ala	Met	Gln	Arg	Phe	Arg	Tyr		
225					230				235						240		
Pro	Glu	Arg	Pro	Ile	Ile	Phe	Leu	Ser	Gly	Cys	Tyr	Thr	Met	Val	Ser		
			245						250					255			
Val	Ala	Tyr	Ile	Ala	Gly	Phe	Val	Leu	Gln	Glu	Arg	Val	Val	Cys	Asn		
		260					265					270					
Glu	Arg	Phe	Ser	Glu	Asp	Gly	Tyr	Arg	Thr	Val	Gly	Gln	Gly	Thr	Lys		
	275					280					285						
Lys	Glu	Gly	Cys	Thr	Ile	Leu	Phe	Met	Met	Leu	Tyr	Phe	Phe	Ser	Met		
	290					295					300						
Ala	Ser	Ser	Ile	Trp	Trp	Val	Ile	Leu	Ser	Leu	Thr	Trp	Phe	Leu	Ala		
305				310						315					320		
Ala	Gly	Met	Lys	Trp	Gly	His	Ala	Ala	Ile	Glu	Ala	Asn	Ser	Gln	Tyr		
			325						330					335			
Phe	His	Leu	Ala	Ala	Trp	Ala	Val	Pro	Ala	Val	Lys	Thr	Ile	Thr	Ile		
		340					345						350				
Leu	Ala	Met	Gly	Gln	Ile	Asp	Gly	Asp	Leu	Leu	Ser	Gly	Val	Cys	Phe		
	355					360					365						
Val	Gly	Leu	Asn	Arg	Leu	Asp	Pro	Leu	Arg	Gly	Phe	Val	Leu	Ala	Pro		
	370				375					380							
Leu	Phe	Val	Tyr	Leu	Phe	Ile	Gly	Thr	Ser	Phe	Leu	Leu	Ala	Gly	Phe		
385				390					395					400			
Val	Ser	Leu	Phe	Arg	Ile	Arg	Thr	Ile	Met	Lys	His	Asp	Gly	Thr	Lys		
			405						410					415			
Thr	Glu	Pro	Leu	Glu	Arg	Leu	Met	Val	Arg	Ile	Gly	Val	Phe	Ser	Val		
	420						425						430				
Leu	Tyr	Thr	Val	Pro	Ala	Thr	Ile	Val	Ile	Ala	Cys	Tyr	Phe	Tyr	Glu		
	435					440					445						
Gln	Ala	Phe	Arg	Glu	His	Trp	Glu	Arg	Ser	Trp	Val	Ser	Gln	His	Cys		
	450					455				460							
Lys	Ser	Leu	Ala	Ile	Pro	Cys	Pro	Ala	His	Tyr	Thr	Pro	Arg	Thr	Ser		
465				470					475					480			
Pro	Asp	Phe	Thr	Val	Tyr	Met	Ile	Lys	Tyr	Leu	Met	Thr	Leu	Ile	Val		
			485						490					495			
Gly	Ile	Thr	Ser	Gly	Phe	Trp	Ile	Trp	Ser	Gly	Lys	Thr	Leu	His	Ser		
		500					505					510					
Trp	Arg	Lys	Phe	Tyr	Thr	Arg	Leu	Thr	Asn	Ser	Arg	His	Gly	Glu	Thr		
		515					520					525					
Thr																	

<210> 42
 <211> 536
 <212> PRT
 <213> Drosophila

<400> 42

Ile	Leu	Pro	Thr	Leu	Ile	Gln	Gly	Val	Gln	Arg	Tyr	Asp	Gln	Ser	Pro
1				5					10					15	
Leu	Asp	Ala	Ser	Pro	Tyr	Tyr	Arg	Ser	Gly	Gly	Gly	Leu	Met	Ala	Ser
			20					25					30		
Ser	Gly	Thr	Glu	Leu	Asp	Gly	Leu	Pro	His	His	Asn	Arg	Cys	Glu	Pro
		35					40					45			
Ile	Thr	Ile	Ser	Ile	Cys	Lys	Asn	Ile	Pro	Tyr	Asn	Met	Thr	Ile	Met
		50				55					60				
Pro	Asn	Leu	Ile	Gly	His	Thr	Lys	Gln	Glu	Glu	Ala	Gly	Leu	Glu	Val
65					70					75					80
His	Gln	Phe	Ala	Pro	Leu	Val	Lys	Ile	Gly	Cys	Ser	Asp	Asp	Leu	Gln
			85						90					95	
Leu	Phe	Leu	Cys	Ser	Leu	Tyr	Val	Pro	Val	Cys	Thr	Ile	Leu	Glu	Arg
			100					105					110		
Pro	Ile	Pro	Pro	Cys	Arg	Ser	Leu	Cys	Glu	Ser	Ala	Arg	Val	Cys	Glu
		115					120					125			
Lys	Leu	Met	Lys	Thr	Tyr	Asn	Phe	Asn	Trp	Pro	Glu	Asn	Leu	Glu	Cys
		130				135					140				
Ser	Lys	Phe	Pro	Val	His	Gly	Gly	Glu	Asp	Leu	Cys	Val	Ala	Glu	Asn
145					150					155					160
Thr	Thr	Ser	Ser	Ala	Ser	Thr	Ala	Ala	Thr	Pro	Thr	Arg	Ser	Val	Ala
				165					170					175	
Val	Gly	Gly	Lys	Asp	Leu	His	Asp	Cys	Gly	Ala	Pro	Cys	His	Ala	Met
			180					185					190		
Phe	Phe	Pro	Glu	Arg	Glu	Arg	Thr	Val	Leu	Arg	Tyr	Trp	Val	Gly	Ser
		195					200					205			
Trp	Ala	Ala	Val	Cys	Val	Ala	Ser	Cys	Leu	Phe	Thr	Val	Leu	Thr	Phe
		210				215					220				
Leu	Ile	Asp	Ser	Ser	Arg	Phe	Arg	Tyr	Pro	Glu	Arg	Ala	Ile	Val	Phe
225					230					235					240
Leu	Ala	Val	Cys	Tyr	Leu	Val	Val	Gly	Cys	Ala	Tyr	Val	Ala	Gly	Leu
				245					250					255	
Gly	Ala	Gly	Asp	Ser	Val	Ser	Cys	Arg	Glu	Pro	Phe	Pro	Pro	Pro	Val
			260					265					270		
Lys	Leu	Gly	Arg	Leu	Gln	Met	Met	Ser	Thr	Ile	Thr	Gln	Gly	His	Arg
		275					280					285			
Gln	Thr	Thr	Ser	Cys	Thr	Val	Leu	Phe	Met	Ala	Leu	Tyr	Phe	Cys	Cys
		290				295					300				
Met	Ala	Ala	Phe	Ala	Trp	Trp	Ser	Cys	Leu	Ala	Phe	Ala	Trp	Phe	Leu
305					310					315					320
Ala	Ala	Gly	Leu	Lys	Trp	Gly	His	Glu	Ala	Ile	Glu	Asn	Lys	Ser	His
				325					330					335	
Leu	Phe	His	Leu	Val	Ala	Trp	Ala	Val	Pro	Ala	Leu	Gln	Thr	Ile	Ser
			340					345					350		
Val	Leu	Ala	Leu	Ala	Lys	Val	Glu	Gly	Asp	Ile	Leu	Ser	Gly	Val	Cys
		355					360					365			
Phe	Val	Gly	Gln	Leu	Asp	Thr	His	Ser	Leu	Gly	Ala	Phe	Leu	Ile	Leu
		370				375					380				
Pro	Leu	Cys	Ile	Tyr	Leu	Ser	Ile	Gly	Ala	Leu	Phe	Leu	Leu	Ala	Gly
385					390					395					400

Phe Ile Ser Leu Phe Arg Ile Arg Thr Val Met Lys Thr Asp Gly Lys
 405 410 415
 Arg Thr Asp Lys Leu Glu Arg Leu Met Leu Arg Ile Gly Phe Phe Ser
 420 425 430
 Gly Leu Phe Ile Leu Pro Ala Val Gly Leu Leu Gly Cys Leu Phe Tyr
 435 440 445
 Glu Tyr Tyr Asn Phe Asp Glu Trp Met Ile Gln Trp His Arg Asp Ile
 450 455 460
 Cys Lys Pro Phe Ser Ile Pro Cys Pro Ala Ala Arg Ala Pro Gly Ser
 465 470 475 480
 Pro Glu Ala Arg Pro Ile Phe Gln Ile Phe Met Val Lys Tyr Leu Cys
 485 490 495
 Ser Met Leu Val Gly Val Thr Ser Ser Val Trp Leu Tyr Ser Ser Lys
 500 505 510
 Thr Met Val Ser Trp Arg Asn Phe Val Glu Arg Leu Gln Gly Lys Glu
 515 520 525
 Pro Arg Thr Arg Ala Gln Ala Tyr
 530 535

<210> 43
 <211> 570
 <212> PRT
 <213> Drosophila

<400> 43
 Gly Leu Val Leu Leu Leu Thr Ser Cys Arg Ala Asp Gly Pro Leu His
 1 5 10 15
 Ser Ala Asp His Gly Met Gly Gly Met Gly Met Gly Gly His Gly Leu
 20 25 30
 Asp Ala Ser Pro Ala Pro Gly Tyr Gly Val Pro Ala Ile Pro Lys Asp
 35 40 45
 Pro Asn Leu Arg Cys Glu Glu Ile Thr Ile Pro Met Cys Arg Gly Ile
 50 55 60
 Gly Tyr Asn Met Thr Ser Phe Pro Asn Glu Met Asn His Glu Thr Gln
 65 70 75 80
 Asp Glu Ala Gly Leu Glu Val His Gln Phe Trp Pro Leu Val Glu Ile
 85 90 95
 Lys Cys Ser Pro Asp Leu Lys Phe Phe Leu Cys Ser Met Tyr Thr Pro
 100 105 110
 Ile Cys Leu Glu Asp Tyr His Lys Pro Leu Pro Val Cys Arg Ser Val
 115 120 125
 Cys Glu Arg Ala Arg Ser Gly Cys Ala Pro Ile Met Gln Gln Tyr Ser
 130 135 140
 Phe Glu Trp Pro Glu Arg Met Ala Cys Glu His Leu Pro Leu His Gly
 145 150 155 160
 Asp Pro Asp Asn Leu Cys Met Glu Gln Pro Ser Tyr Thr Glu Ala Gly
 165 170 175
 Ser Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Ser Gly Ser Gly
 180 185 190
 Ser Gly Gly Lys Arg Lys Gln Gly Gly Ser Gly Ser Gly Gly Ser Gly
 195 200 205
 Ala Gly Gly Ser Ser Gly Ser Thr Ser Thr Lys Pro Cys Arg Gly Arg
 210 215 220
 Gln Arg Ile Ala Gly Val Pro Asn Cys Gly Ile Pro Cys Lys Gly Pro
 225 230 235 240
 Phe Phe Ser Asn Asp Glu Lys Asp Phe Ala Gly Leu Trp Ile Ala Leu
 245 250 255

Trp	Ser	Gly	Leu	Cys	Phe	Cys	Ser	Thr	Leu	Met	Thr	Leu	Thr	Thr	Phe
			260					265					270		
Ile	Ile	Asp	Thr	Glu	Arg	Phe	Lys	Tyr	Pro	Glu	Arg	Pro	Ile	Val	Phe
		275					280					285			
Leu	Ser	Ala	Cys	Tyr	Phe	Met	Val	Ala	Val	Gly	Tyr	Leu	Ser	Arg	Asn
		290				295					300				
Phe	Leu	Gln	Asn	Glu	Glu	Ile	Ala	Cys	Asp	Gly	Leu	Leu	Leu	Arg	Glu
305					310					315					320
Ser	Ser	Thr	Gly	Pro	His	Ser	Cys	Thr	Leu	Val	Phe	Leu	Leu	Thr	Tyr
				325					330					335	
Phe	Phe	Gly	Met	Ala	Ser	Ser	Ile	Trp	Trp	Val	Ile	Leu	Thr	Phe	Thr
			340					345					350		
Trp	Phe	Leu	Ala	Ala	Gly	Leu	Lys	Trp	Gly	Asn	Glu	Ala	Ile	Thr	Lys
		355					360					365			
His	Ser	Gln	Tyr	Phe	His	Leu	Ala	Ala	Trp	Leu	Ile	Pro	Thr	Val	Gln
		370				375					380				
Ser	Val	Ala	Val	Leu	Leu	Leu	Ser	Ala	Val	Asp	Gly	Asp	Pro	Ile	Leu
385					390					395					400
Gly	Ile	Cys	Tyr	Val	Gly	Asn	Leu	Asn	Pro	Asp	His	Leu	Lys	Thr	Phe
				405					410					415	
Val	Leu	Ala	Pro	Leu	Phe	Val	Tyr	Leu	Val	Ile	Gly	Thr	Thr	Phe	Leu
			420					425					430		
Met	Ala	Gly	Phe	Val	Ser	Leu	Phe	Arg	Ile	Arg	Ser	Val	Ile	Lys	Gln
		435					440					445			
Gln	Gly	Gly	Val	Gly	Ala	Gly	Val	Lys	Ala	Asp	Lys	Leu	Glu	Lys	Leu
		450				455					460				
Met	Ile	Arg	Ile	Gly	Ile	Phe	Ser	Val	Leu	Tyr	Thr	Val	Pro	Ala	Thr
465					470					475					480
Ile	Val	Ile	Gly	Cys	Tyr	Leu	Tyr	Glu	Ala	Ala	Tyr	Phe	Glu	Asp	Trp
				485					490					495	
Ile	Lys	Ala	Leu	Ala	Cys	Pro	Cys	Ala	Gln	Val	Lys	Gly	Pro	Gly	Lys
			500					505					510		
Lys	Pro	Leu	Tyr	Ser	Val	Leu	Met	Leu	Lys	Tyr	Phe	Met	Ala	Leu	Ala
			515				520					525			
Val	Gly	Ile	Thr	Ser	Gly	Val	Trp	Ile	Trp	Ser	Gly	Lys	Thr	Leu	Glu
		530				535					540				
Ser	Trp	Arg	Arg	Phe	Trp	Arg	Arg	Leu	Leu	Gly	Ala	Pro	Asp	Arg	Thr
545					550					555					560
Gly	Ala	Asn	Gln	Ala	Leu	Ile	Lys	Gln	Arg						
				565					570						

<210> 44
 <211> 647
 <212> PRT
 <213> Homo sapiens

<400> 44
 Met Ala Glu Glu Glu Ala Pro Lys Lys Ser Arg Ala Ala Gly Gly Gly
 1 5 10 15
 Ala Ser Trp Glu Leu Cys Ala Gly Ala Leu Ser Ala Arg Leu Ala Glu
 20 25 30
 Glu Gly Ser Gly Asp Ala Gly Gly Arg Arg Arg Pro Pro Val Asp Pro
 35 40 45
 Arg Arg Leu Ala Arg Gln Leu Leu Leu Leu Leu Trp Leu Leu Glu Ala
 50 55 60
 Pro Leu Leu Leu Gly Val Arg Ala Gln Ala Ala Gly Gln Gly Pro Gly
 65 70 75 80

Gln	Gly	Pro	Gly	Pro	Gly	Gln	Gln	Pro	Pro	Pro	Pro	Pro	Gln	Gln	Gln
				85					90					95	
Gln	Ser	Gly	Gln	Gln	Tyr	Asn	Gly	Glu	Arg	Gly	Ile	Ser	Val	Pro	Asp
			100					105					110		
His	Gly	Tyr	Cys	Gln	Pro	Ile	Ser	Ile	Pro	Leu	Cys	Thr	Asp	Ile	Ala
		115					120					125			
Tyr	Asn	Gln	Thr	Ile	Met	Pro	Asn	Leu	Leu	Gly	His	Thr	Asn	Gln	Glu
	130					135					140				
Asp	Ala	Gly	Leu	Glu	Val	His	Gln	Phe	Tyr	Pro	Leu	Val	Lys	Val	Gln
145					150					155					160
Cys	Ser	Ala	Glu	Leu	Lys	Phe	Phe	Leu	Cys	Ser	Met	Tyr	Ala	Pro	Val
			165						170						175
Cys	Thr	Val	Leu	Glu	Gln	Ala	Leu	Pro	Pro	Cys	Arg	Ser	Leu	Cys	Glu
			180					185					190		
Arg	Ala	Arg	Gln	Gly	Cys	Glu	Ala	Leu	Met	Asn	Lys	Phe	Gly	Phe	Gln
		195					200					205			
Trp	Pro	Asp	Thr	Leu	Lys	Cys	Glu	Lys	Phe	Pro	Val	His	Gly	Ala	Gly
	210					215					220				
Glu	Leu	Cys	Val	Gly	Gln	Asn	Thr	Ser	Asp	Lys	Gly	Thr	Pro	Thr	Pro
225					230					235					240
Ser	Leu	Leu	Pro	Glu	Phe	Trp	Thr	Ser	Asn	Pro	Gln	His	Gly	Gly	Gly
				245					250					255	
Gly	His	Arg	Gly	Gly	Phe	Pro	Gly	Gly	Ala	Gly	Ala	Ser	Glu	Arg	Gly
			260					265					270		
Lys	Phe	Ser	Cys	Pro	Arg	Ala	Leu	Lys	Val	Pro	Ser	Tyr	Leu	Asn	Tyr
		275					280					285			
His	Phe	Leu	Gly	Glu	Lys	Asp	Cys	Gly	Ala	Pro	Cys	Glu	Pro	Thr	Lys
	290					295					300				
Val	Tyr	Gly	Leu	Met	Tyr	Phe	Gly	Pro	Glu	Glu	Leu	Arg	Phe	Ser	Arg
305					310					315					320
Thr	Trp	Ile	Gly	Ile	Trp	Ser	Val	Leu	Cys	Cys	Ala	Ser	Thr	Leu	Phe
			325						330					335	
Thr	Val	Leu	Thr	Tyr	Leu	Val	Asp	Met	Arg	Arg	Phe	Ser	Tyr	Pro	Glu
			340					345					350		
Arg	Pro	Ile	Ile	Phe	Leu	Ser	Gly	Cys	Tyr	Thr	Ala	Val	Ala	Val	Ala
		355					360					365			
Tyr	Ile	Ala	Gly	Phe	Leu	Leu	Glu	Asp	Arg	Val	Val	Cys	Asn	Asp	Lys
	370					375					380				
Phe	Ala	Glu	Asp	Gly	Ala	Arg	Thr	Val	Ala	Gln	Gly	Thr	Lys	Lys	Glu
385					390					395					400
Gly	Cys	Thr	Ile	Leu	Phe	Met	Met	Leu	Tyr	Phe	Phe	Ser	Met	Ala	Ser
			405						410					415	
Ser	Ile	Trp	Trp	Val	Ile	Leu	Ser	Leu	Thr	Trp	Phe	Leu	Ala	Ala	Gly
		420						425					430		
Met	Lys	Trp	Gly	His	Glu	Ala	Ile	Glu	Ala	Asn	Ser	Gln	Tyr	Phe	His
		435					440					445			
Leu	Ala	Ala	Trp	Ala	Val	Pro	Ala	Ile	Lys	Thr	Ile	Thr	Ile	Leu	Ala
		450					455				460				
Leu	Gly	Gln	Val	Asp	Gly	Asp	Val	Leu	Ser	Gly	Val	Cys	Phe	Val	Gly
465					470					475					480
Leu	Asn	Asn	Val	Asp	Ala	Leu	Arg	Gly	Phe	Val	Leu	Ala	Pro	Leu	Phe
				485					490					495	
Val	Tyr	Leu	Phe	Ile	Gly	Thr	Ser	Phe	Leu	Leu	Ala	Gly	Phe	Val	Ser
			500					505					510		
Leu	Phe	Arg	Ile	Arg	Thr	Ile	Met	Lys	His	Asp	Gly	Thr	Lys	Thr	Glu
		515					520					525			
Lys	Leu	Glu	Lys	Leu	Met	Val	Arg	Ile	Gly	Val	Phe	Ser	Val	Leu	Tyr

530		535		540
Thr Val Pro Ala Thr	Ile Val Ile Ala Cys Tyr Phe Tyr Glu Gln Ala			
545		550		555
Phe Arg Asp Gln Trp	Glu Arg Ser Trp Val Ala Gln Ser Cys Lys Ser			560
	565		570	575
Tyr Ala Ile Pro Cys	Pro His Leu Gln Ala Gly Gly Gly Ala Pro Pro			
	580		585	590
His Pro Pro Met Ser	Pro Asp Phe Thr Val Phe Met Ile Lys Tyr Leu			
	595		600	605
Met Thr Leu Ile Val	Gly Ile Thr Ser Gly Phe Trp Ile Trp Ser Gly			
	610		615	620
Lys Thr Leu Asn Ser	Trp Arg Lys Phe Tyr Thr Arg Leu Thr Asn Ser			
625		630		635
Lys Gln Gly Glu Thr	Thr Val			640
	645			

<210> 45
 <211> 626
 <212> PRT
 <213> Mouse

<400> 45

Met Ala Glu Glu Ala	Ala Pro Ser Glu Ser Arg Ala Ala Gly Arg Leu
1	5 10 15
Ser Leu Glu Leu Cys	Ala Glu Ala Leu Pro Gly Arg Arg Glu Glu Val
	20 25 30
Gly His Glu Asp Thr	Ala Ser His Arg Arg Pro Arg Ala Asp Pro Arg
	35 40 45
Arg Trp Ala Ser Gly	Leu Leu Leu Leu Trp Leu Leu Glu Ala Pro
	50 55 60
Leu Leu Leu Gly Val	Arg Ala Gln Ala Ala Gly Gln Val Ser Gly Pro
65	70 75 80
Gly Gln Gln Ala Pro	Pro Pro Pro Gln Pro Gln Gln Ser Gly Gln Gln
	85 90 95
Tyr Asn Gly Glu Arg	Gly Ile Ser Ile Pro Asp His Gly Tyr Cys Gln
	100 105 110
Pro Ile Ser Ile Pro	Leu Cys Thr Asp Met Ala Tyr Asn Gln Thr Ile
	115 120 125
Met Pro Asn Leu Leu	Gly His Thr Asn Gln Glu Asp Ala Gly Leu Glu
	130 135 140
Val His Gln Phe Tyr	Pro Leu Val Lys Val Gln Cys Ser Ala Glu Leu
145	150 155 160
Lys Phe Phe Leu Cys	Ser Met Tyr Ala Pro Val Cys Thr Val Leu Glu
	165 170 175
Gln Ala Leu Pro Cys	Arg Ser Leu Cys Glu Arg Ala Arg Gln Gly
	180 185 190
Cys Glu Ala Leu Met	Asn Lys Phe Gly Phe Gln Trp Pro Asp Thr Leu
	195 200 205
Lys Cys Glu Lys Phe	Pro Val His Gly Ala Gly Glu Leu Cys Val Gly
	210 215 220
Gln Asn Thr Ser Asp	Lys Gly Thr Pro Thr Pro Ser Leu Leu Pro Glu
225	230 235 240
Phe Trp Thr Ser Asn	Gly Gln His Gly Gly Gly Gly Tyr Arg Gly Gly
	245 250 255
Tyr Pro Gly Gly Ala	Gly Thr Val Glu Arg Gly Lys Phe Ser Cys Pro
	260 265 270
Arg Ala Leu Arg Val	Pro Ser Tyr Leu Asn Tyr His Phe Leu Gly Glu

275	280	285
Lys Asp Cys Gly Ala Pro Cys Glu Pro Thr Lys Val Tyr Gly Leu Met		
290	295	300
Tyr Phe Gly Pro Glu Glu Leu Arg Phe Ser Arg Thr Trp Ile Gly Ile		
305	310	315
Trp Ser Val Leu Cys Cys Ala Ser Thr Leu Phe Thr Val Leu Thr Tyr		
325	330	335
Leu Val Asp Met Pro Arg Phe Ser Tyr Pro Glu Arg Pro Ile Ile Ser		
340	345	350
Leu Ser Gly Cys Tyr Thr Ala Val Ala Val Ala Tyr Ile Ala Gly Phe		
355	360	365
Leu Leu Glu Asp Arg Val Val Cys Asn Asp Lys Phe Ala Glu Asp Gly		
370	375	380
Ala Arg Thr Val Ala Gln Gly Thr Asn Lys Glu Gly Cys Thr Ile Leu		
385	390	395
Phe Met Met Leu Tyr Phe Phe Ser Met Ala Ser Ser Ile Trp Trp Val		
405	410	415
Ile Leu Ser Leu Thr Trp Phe Leu Ala Ala Gly Met Lys Trp Gly His		
420	425	430
Glu Ala Ile Glu Ala Asn Ser Gln Tyr Phe His Leu Ala Ala Trp Ala		
435	440	445
Val Pro Ala Ile Lys Thr Ile Thr Ile Leu Ala Leu Gly Gln Val Asp		
450	455	460
Gly Asp Val Leu Ser Gly Val Cys Phe Leu Gly Leu Asn Asn Val Asp		
465	470	475
Ala Leu Arg Gly Phe Val Leu Ala Pro Leu Phe Val Tyr Leu Phe Ile		
485	490	495
Gly Thr Ser Phe Leu Leu Ala Gly Phe Val Ser Leu Phe Arg Ile Arg		
500	505	510
Thr Ile Met Lys His Asp Gly Thr Lys Thr Glu Lys Leu Glu Lys Leu		
515	520	525
Met Val Arg Ile Gly Val Phe Ser Val Leu Tyr Thr Val Pro Ala Thr		
530	535	540
Ile Val Ile Ala Cys Tyr Phe Tyr Glu Gln Ala Phe Arg Asp Gln Trp		
545	550	555
Glu Arg Ser Trp Val Ala Gln Ser Cys Lys Ser Tyr Ala Ile Pro Cys		
565	570	575
Pro His Leu Gln Gly Gly Gly Gly Val Pro Pro His Pro Pro Met Ser		
580	585	590
Pro Asp Phe Thr Val Phe Met Ile Lys Tyr Leu Met Thr Leu Asn Ser		
595	600	605
Trp Arg Lys Phe Tyr Thr Arg Leu Thr Asn Ser Lys Gln Gly Glu Thr		
610	615	620
Thr Val		
625		

<210> 46

<211> 565

<212> PRT

<213> Homo sapiens

<400> 46

Met Arg Pro Arg Ser Ala Leu Pro Arg Leu Leu Leu Pro Leu Leu Leu
1 5 10 15
Leu Pro Ala Ala Gly Pro Ala Gln Phe His Gly Glu Lys Gly Ile Ser
20 25 30
Ile Pro Asp His Gly Phe Cys Gln Pro Ile Ser Ile Pro Leu Cys Thr

35	40	45													
Asp	Ile	Ala	Tyr	Asn	Gln	Thr	Ile	Met	Pro	Asn	Leu	Leu	Gly	His	Thr
50						55					60				
Asn	Gln	Glu	Asp	Ala	Gly	Leu	Glu	Val	His	Gln	Phe	Tyr	Pro	Leu	Val
65					70					75				80	
Lys	Val	Gln	Cys	Ser	Pro	Glu	Leu	Arg	Phe	Phe	Leu	Cys	Ser	Met	Tyr
				85					90					95	
Ala	Pro	Val	Cys	Thr	Val	Leu	Glu	Gln	Ala	Ile	Pro	Pro	Cys	Arg	Ser
			100					105					110		
Ile	Cys	Glu	Arg	Ala	Arg	Gln	Gly	Cys	Glu	Ala	Leu	Met	Asn	Lys	Phe
	115					120						125			
Gly	Phe	Gln	Trp	Pro	Glu	Arg	Leu	Arg	Cys	Glu	His	Phe	Pro	Arg	His
130					135						140				
Gly	Ala	Glu	Gln	Ile	Cys	Val	Gly	Gln	Asn	His	Ser	Glu	Asp	Gly	Ala
145				150						155				160	
Pro	Ala	Leu	Leu	Thr	Thr	Ala	Pro	Pro	Pro	Gly	Leu	Gln	Pro	Gly	Ala
				165					170					175	
Gly	Gly	Thr	Pro	Gly	Gly	Pro	Gly	Gly	Gly	Gly	Ala	Pro	Pro	Arg	Tyr
	180						185					190			
Ala	Thr	Leu	Glu	His	Pro	Phe	His	Cys	Pro	Arg	Val	Leu	Lys	Val	Pro
195						200						205			
Ser	Tyr	Leu	Ser	Tyr	Lys	Phe	Leu	Gly	Glu	Arg	Asp	Cys	Ala	Ala	Pro
210					215						220				
Cys	Glu	Pro	Ala	Arg	Pro	Asp	Gly	Ser	Met	Phe	Phe	Ser	Gln	Glu	Glu
225				230						235				240	
Thr	Arg	Phe	Ala	Arg	Leu	Trp	Ile	Leu	Thr	Trp	Ser	Val	Leu	Cys	Cys
				245					250					255	
Ala	Ser	Thr	Phe	Thr	Val	Thr	Thr	Tyr	Leu	Val	Asp	Met	Gln	Arg	
	260					265					270				
Phe	Arg	Tyr	Pro	Glu	Arg	Pro	Ile	Phe	Leu	Ser	Gly	Cys	Tyr	Thr	
275					280						285				
Met	Val	Ser	Val	Ala	Tyr	Ile	Ala	Gly	Phe	Val	Leu	Gln	Glu	Arg	Val
290					295						300				
Val	Cys	Asn	Glu	Arg	Phe	Ser	Glu	Asp	Gly	Tyr	Arg	Thr	Val	Val	Gln
305				310						315				320	
Gly	Thr	Lys	Lys	Glu	Gly	Cys	Thr	Ile	Leu	Phe	Met	Met	Leu	Tyr	Phe
				325					330					335	
Phe	Ser	Met	Ala	Ser	Ser	Ile	Trp	Trp	Val	Ile	Leu	Ser	Leu	Thr	Trp
			340				345						350		
Phe	Leu	Ala	Ala	Gly	Met	Lys	Trp	Gly	His	Glu	Ala	Ile	Glu	Ala	Asn
	355					360						365			
Ser	Gln	Tyr	Phe	His	Leu	Ala	Ala	Trp	Ala	Val	Pro	Ala	Val	Lys	Thr
370					375						380				
Ile	Thr	Ile	Leu	Ala	Met	Gly	Gln	Ile	Asp	Gly	Asp	Leu	Leu	Ser	Gly
385				390						395				400	
Val	Cys	Phe	Val	Gly	Leu	Asn	Ser	Leu	Asp	Pro	Leu	Arg	Gly	Phe	Val
				405					410					415	
Leu	Ala	Pro	Leu	Phe	Val	Tyr	Leu	Phe	Ile	Gly	Thr	Ser	Phe	Leu	Leu
			420				425						430		
Ala	Gly	Phe	Val	Ser	Leu	Phe	Arg	Ile	Arg	Thr	Ile	Met	Lys	His	Asp
	435					440						445			
Gly	Thr	Lys	Thr	Glu	Lys	Leu	Glu	Arg	Leu	Met	Val	Arg	Ile	Gly	Val
450					455					460					
Phe	Ser	Val	Leu	Tyr	Thr	Val	Pro	Ala	Thr	Ile	Val	Ile	Ala	Cys	Tyr
465				470					475					480	
Phe	Tyr	Glu	Gln	Ala	Phe	Arg	Glu	His	Trp	Glu	Arg	Ser	Trp	Val	Ser
				485					490					495	

Gln His Cys Lys Ser Leu Ala Ile Pro Cys Pro Ala His Tyr Thr Pro
500 505 510
Arg Met Ser Pro Asp Phe Thr Val Tyr Met Ile Lys Tyr Leu Met Thr
515 520 525
Leu Ile Val Gly Ile Thr Ser Gly Phe Trp Ile Trp Ser Gly Lys Thr
530 535 540
Leu His Ser Trp Arg Lys Phe Tyr Thr Arg Leu Thr Asn Ser Arg His
545 550 555 560
Gly Glu Thr Thr Val
565

<210> 47

<211> 666

<212> PRT

<213> Homo sapiens

<400> 47

Met Ala Met Thr Trp Ile Val Phe Ser Leu Trp Pro Leu Thr Val Phe
1 5 10 15
Met Gly His Ile Gly Gly His Ser Leu Phe Ser Cys Glu Pro Ile Thr
20 25 30
Leu Arg Met Cys Gln Asp Leu Pro Tyr Asn Thr Thr Phe Met Pro Asn
35 40 45
Leu Leu Asn His Tyr Asp Gln Gln Thr Ala Ala Leu Ala Met Glu Pro
50 55 60
Phe His Pro Met Val Asn Leu Asp Cys Ser Arg Asp Phe Arg Pro Phe
65 70 75 80
Leu Cys Ala Leu Tyr Ala Pro Ile Cys Met Glu Tyr Gly Arg Val Thr
85 90 95
Leu Pro Cys Arg Arg Leu Cys Gln Arg Ala Tyr Ser Glu Cys Ser Lys
100 105 110
Leu Met Glu Met Phe Gly Val Pro Trp Pro Glu Asp Met Glu Cys Ser
115 120 125
Arg Phe Pro Asp Cys Asp Glu Pro Tyr Pro Arg Leu Val Asp Leu Asn
130 135 140
Leu Ala Gly Glu Pro Thr Glu Gly Ala Pro Val Ala Val Gln Arg Asp
145 150 155 160
Tyr Gly Phe Trp Cys Pro Arg Glu Leu Lys Ile Asp Pro Asp Leu Gly
165 170 175
Tyr Ser Phe Leu His Val Arg Asp Cys Ser Pro Pro Cys Pro Asn Met
180 185 190
Tyr Phe Arg Arg Glu Glu Leu Ser Phe Ala Arg Tyr Phe Ile Gly Leu
195 200 205
Ile Ser Ile Ile Cys Leu Ser Ala Thr Leu Phe Thr Phe Leu Thr Phe
210 215 220
Leu Ile Asp Val Thr Arg Phe Arg Tyr Pro Glu Arg Pro Ile Ile Phe
225 230 235 240
Tyr Ala Val Cys Tyr Met Met Val Ser Leu Ile Phe Phe Ile Gly Phe
245 250 255
Leu Leu Glu Asp Arg Val Ala Cys Asn Ala Ser Ile Pro Ala Gln Tyr
260 265 270
Lys Ala Ser Thr Val Thr Gln Gly Ser His Asn Lys Ala Cys Thr Met
275 280 285
Leu Phe Met Ile Leu Tyr Phe Phe Thr Met Ala Gly Ser Val Trp Trp
290 295 300
Val Ile Leu Thr Ile Thr Trp Phe Leu Ala Ala Val Pro Lys Trp Gly
305 310 315 320

Ser Glu Ala Ile Glu Lys Lys Ala Leu Leu Phe His Ala Ser Ala Trp
 325 330 335
 Gly Ile Pro Gly Thr Leu Thr Ile Ile Leu Leu Ala Met Asn Lys Ile
 340 345 350
 Glu Gly Asp Asn Ile Ser Gly Val Cys Phe Val Gly Leu Tyr Asp Val
 355 360 365
 Asp Ala Leu Arg Tyr Phe Val Leu Ala Pro Leu Cys Leu Tyr Val Val
 370 375 380
 Val Gly Val Ser Leu Leu Leu Ala Gly Ile Ile Ser Leu Asn Arg Val
 385 390 395 400
 Arg Ile Glu Ile Pro Leu Glu Lys Glu Asn Gln Asp Lys Leu Val Lys
 405 410 415
 Phe Met Ile Arg Ile Gly Val Phe Ser Ile Leu Tyr Leu Val Pro Leu
 420 425 430
 Leu Val Val Ile Gly Cys Tyr Phe Tyr Glu Gln Ala Tyr Arg Gly Ile
 435 440 445
 Trp Glu Thr Thr Trp Ile Gln Glu Arg Cys Arg Glu Tyr His Ile Pro
 450 455 460
 Cys Pro Tyr Gln Val Thr Gln Met Ser Arg Pro Asp Leu Ile Leu Phe
 465 470 475 480
 Leu Met Lys Tyr Leu Met Ala Leu Ile Val Gly Ile Pro Ser Val Phe
 485 490 495
 Trp Val Gly Ser Lys Lys Thr Cys Phe Glu Trp Ala Ser Phe Phe His
 500 505 510
 Gly Arg Arg Lys Lys Glu Ile Val Asn Glu Ser Arg Gln Val Leu Gln
 515 520 525
 Glu Pro Asp Phe Ala Gln Ser Leu Leu Arg Asp Pro Asn Thr Pro Ile
 530 535 540
 Ile Arg Lys Ser Arg Gly Thr Ser Thr Gln Gly Thr Ser Thr His Ala
 545 550 555 560
 Ser Ser Thr Gln Leu Ala Met Val Asp Asp Gln Arg Ser Lys Ala Gly
 565 570 575
 Ser Ile His Ser Lys Val Ser Ser Tyr His Gly Ser Leu His Arg Ser
 580 585 590
 Arg Asp Gly Arg Tyr Thr Pro Cys Ser Tyr Arg Gly Met Glu Glu Arg
 595 600 605
 Leu Pro His Gly Ser Met Ser Arg Leu Thr Asp His Ser Arg His Ser
 610 615 620
 Ser Ser His Arg Leu Asn Glu Gln Ser Arg His Ser Ser Ile Arg Asp
 625 630 635 640
 Leu Ser Asn Asn Pro Met Thr His Ile Thr His Gly Thr Ser Met Asn
 645 650 655
 Arg Val Ile Glu Glu Asp Gly Thr Ser Ala
 660 665

<210> 48
 <211> 666
 <212> PRT
 <213> Mouse

<400> 48
 Met Ala Val Ser Trp Ile Val Phe Asp Leu Trp Leu Leu Thr Val Phe
 1 5 10 15
 Leu Gly Gln Ile Gly Gly His Ser Leu Phe Ser Cys Glu Pro Ile Thr
 20 25 30
 Leu Arg Met Cys Gln Asp Leu Pro Tyr Asn Thr Thr Phe Met Pro Asn
 35 40 45

Leu	Leu	Asn	His	Tyr	Asp	Gln	Gln	Thr	Ala	Ala	Leu	Ala	Met	Glu	Pro
50						55					60				
Phe	His	Pro	Met	Val	Asn	Leu	Asp	Cys	Ser	Arg	Asp	Phe	Arg	Pro	Phe
65					70					75					80
Leu	Cys	Ala	Leu	Tyr	Ala	Pro	Ile	Cys	Met	Glu	Tyr	Gly	Arg	Val	Thr
				85					90					95	
Leu	Pro	Cys	Arg	Arg	Leu	Cys	Gln	Arg	Ala	Tyr	Ser	Glu	Cys	Ser	Lys
			100					105					110		
Leu	Met	Glu	Met	Phe	Gly	Val	Pro	Trp	Pro	Glu	Asp	Met	Glu	Cys	Ser
	115						120					125			
Arg	Phe	Pro	Asp	Cys	Asp	Glu	Pro	Tyr	Pro	Arg	Leu	Val	Asp	Leu	Asn
130						135					140				
Leu	Val	Gly	Asp	Pro	Thr	Glu	Gly	Ala	Pro	Val	Ala	Val	Gln	Arg	Asp
145					150					155					160
Tyr	Gly	Phe	Trp	Cys	Pro	Arg	Glu	Leu	Lys	Ile	Asp	Pro	Asp	Leu	Gly
				165					170					175	
Tyr	Ser	Phe	Leu	His	Val	Arg	Asp	Cys	Ser	Pro	Pro	Cys	Pro	Asn	Met
		180						185					190		
Tyr	Phe	Arg	Arg	Glu	Glu	Leu	Ser	Phe	Ala	Arg	Tyr	Phe	Ile	Gly	Leu
	195						200					205			
Ile	Ser	Ile	Ile	Cys	Leu	Ser	Ala	Thr	Leu	Phe	Thr	Phe	Leu	Thr	Phe
210						215					220				
Leu	Ile	Asp	Val	Thr	Arg	Phe	Arg	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Phe
225					230					235					240
Tyr	Ala	Val	Cys	Tyr	Met	Met	Val	Ser	Leu	Ile	Phe	Phe	Ile	Gly	Phe
				245					250					255	
Leu	Leu	Glu	Asp	Arg	Val	Ala	Cys	Asn	Ala	Ser	Ser	Pro	Ala	Gln	Tyr
		260						265					270		
Lys	Ala	Ser	Thr	Val	Thr	Gln	Gly	Ser	His	Asn	Lys	Ala	Cys	Thr	Met
	275						280					285			
Leu	Phe	Met	Val	Leu	Tyr	Phe	Thr	Met	Ala	Gly	Ser	Val	Trp	Trp	
290						295				300					
Val	Ile	Leu	Thr	Ile	Thr	Trp	Phe	Leu	Ala	Ala	Val	Pro	Lys	Trp	Gly
305					310					315					320
Ser	Glu	Ala	Ile	Glu	Lys	Lys	Ala	Leu	Leu	Phe	His	Ala	Ser	Ala	Trp
				325					330					335	
Gly	Ile	Pro	Gly	Thr	Leu	Thr	Ile	Ile	Leu	Leu	Ala	Met	Asn	Lys	Ile
			340					345					350		
Glu	Gly	Asp	Asn	Ile	Ser	Gly	Val	Cys	Phe	Val	Gly	Leu	Tyr	Asp	Val
	355					360					365				
Asp	Ala	Leu	Arg	Tyr	Phe	Val	Leu	Ala	Pro	Leu	Cys	Leu	Tyr	Val	Val
370						375					380				
Val	Gly	Val	Ser	Leu	Leu	Leu	Ala	Gly	Ile	Ile	Ser	Leu	Asn	Arg	Val
385					390					395					400
Arg	Ile	Glu	Ile	Pro	Leu	Glu	Lys	Glu	Asn	Gln	Asp	Lys	Leu	Val	Lys
				405					410					415	
Phe	Met	Ile	Arg	Ile	Gly	Val	Phe	Ser	Ile	Leu	Tyr	Leu	Val	Pro	Leu
		420						425					430		
Leu	Val	Val	Ile	Gly	Cys	Tyr	Phe	Tyr	Glu	Gln	Ala	Tyr	Arg	Gly	Ile
	435						440					445			
Trp	Glu	Thr	Thr	Trp	Ile	Gln	Glu	Arg	Cys	Arg	Glu	Tyr	His	Ile	Pro
450						455					460				
Cys	Pro	Tyr	Gln	Val	Thr	Gln	Met	Ser	Arg	Pro	Asp	Leu	Ile	Leu	Phe
465					470					475					480
Leu	Met	Lys	Tyr	Leu	Met	Ala	Leu	Ile	Val	Gly	Ile	Pro	Ser	Ile	Phe
				485					490					495	
Trp	Val	Gly	Ser	Lys	Lys	Thr	Cys	Phe	Glu	Trp	Ala	Ser	Phe	Phe	His

			500					505				510				
Gly	Arg	Arg	Lys	Lys	Glu	Ile	Val	Asn	Glu	Ser	Arg	Gln	Val	Leu	Gln	
			515					520				525				
Glu	Pro	Asp	Phe	Ala	Gln	Ser	Leu	Leu	Arg	Asp	Pro	Asn	Thr	Pro	Ile	
			530					535				540				
Ile	Arg	Lys	Ser	Arg	Gly	Thr	Ser	Thr	Gln	Gly	Thr	Ser	Thr	His	Ala	
545					550					555					560	
Ser	Ser	Thr	Gln	Leu	Ala	Met	Val	Asp	Asp	Gln	Arg	Ser	Lys	Ala	Gly	
			565					570						575		
Ser	Val	His	Ser	Lys	Val	Ser	Ser	Tyr	His	Gly	Ser	Leu	His	Arg	Ser	
			580					585					590			
Arg	Asp	Gly	Arg	Tyr	Thr	Pro	Cys	Ser	Tyr	Arg	Gly	Met	Glu	Glu	Arg	
			595				600					605				
Leu	Pro	His	Gly	Ser	Met	Ser	Arg	Leu	Thr	Asp	His	Ser	Arg	His	Ser	
	610					615				620						
Ser	Ser	His	Arg	Leu	Asn	Glu	Gln	Ser	Arg	His	Ser	Ser	Ile	Arg	Asp	
625					630					635				640		
Leu	Ser	Asn	Asn	Pro	Met	Thr	His	Ile	Thr	His	Gly	Thr	Ser	Met	Asn	
			645					650					655			
Arg	Val	Ile	Glu	Glu	Asp	Gly	Thr	Ser	Ala							
			660					665								

<210> 49
 <211> 537
 <212> PRT
 <213> Homo sapiens

<400> 49

Met	Ala	Trp	Arg	Gly	Ala	Gly	Pro	Ser	Val	Pro	Gly	Ala	Pro	Gly	Gly	
1				5					10					15		
Val	Gly	Leu	Ser	Leu	Gly	Leu	Leu	Leu	Gln	Leu	Leu	Leu	Leu	Leu	Gly	
			20					25					30			
Pro	Ala	Arg	Gly	Phe	Gly	Asp	Glu	Glu	Glu	Arg	Arg	Cys	Asp	Pro	Ile	
			35			40						45				
Arg	Ile	Ser	Met	Cys	Gln	Asn	Leu	Gly	Tyr	Asn	Val	Thr	Lys	Met	Pro	
	50				55					60						
Asn	Leu	Val	Gly	His	Glu	Leu	Gln	Thr	Asp	Ala	Glu	Leu	Gln	Leu	Thr	
65				70						75				80		
Thr	Phe	Thr	Pro	Leu	Ile	Gln	Tyr	Gly	Cys	Ser	Ser	Gln	Leu	Gln	Phe	
			85					90					95			
Phe	Leu	Cys	Ser	Val	Tyr	Val	Pro	Met	Cys	Thr	Glu	Lys	Ile	Asn	Ile	
			100					105					110			
Pro	Ile	Gly	Pro	Cys	Gly	Gly	Met	Cys	Leu	Ser	Val	Lys	Arg	Arg	Cys	
	115					120						125				
Glu	Pro	Val	Leu	Lys	Glu	Phe	Gly	Phe	Ala	Trp	Pro	Glu	Ser	Leu	Asn	
	130					135					140					
Cys	Ser	Lys	Phe	Pro	Pro	Gln	Asn	Asp	His	Asn	His	Met	Cys	Met	Glu	
145				150						155					160	
Gly	Pro	Gly	Asp	Glu	Glu	Val	Pro	Leu	Pro	His	Lys	Thr	Pro	Ile	Gln	
			165					170					175			
Pro	Gly	Glu	Glu	Cys	His	Ser	Val	Gly	Thr	Asn	Ser	Asp	Gln	Tyr	Ile	
			180					185					190			
Trp	Val	Lys	Arg	Ser	Leu	Asn	Cys	Val	Leu	Lys	Cys	Gly	Tyr	Asp	Ala	
	195					200						205				
Gly	Leu	Tyr	Ser	Arg	Ser	Ala	Lys	Glu	Phe	Thr	Asp	Ile	Trp	Met	Ala	
	210					215					220					
Val	Trp	Ala	Ser	Leu	Cys	Phe	Ile	Ser	Thr	Ala	Phe	Thr	Val	Leu	Thr	

225		230		235		240
Phe Leu Ile Asp Ser Ser Arg Phe Ser Tyr Pro Glu Arg Pro Ile Ile						
	245		250		255	
Phe Leu Ser Met Cys Tyr Asn Ile Tyr Ser Ile Ala Tyr Ile Val Arg						
	260		265		270	
Leu Thr Val Gly Arg Glu Arg Ile Ser Cys Asp Phe Glu Glu Ala Ala						
	275		280		285	
Glu Pro Val Leu Ile Gln Glu Gly Leu Lys Asn Thr Gly Cys Ala Ile						
	290		295		300	
Ile Phe Leu Leu Met Tyr Phe Phe Gly Met Ala Ser Ser Ile Trp Trp						
305		310		315		320
Val Ile Leu Thr Leu Thr Trp Phe Leu Ala Ala Gly Leu Lys Trp Gly						
	325		330		335	
His Glu Ala Ile Glu Met His Ser Ser Tyr Phe His Ile Ala Ala Trp						
	340		345		350	
Ala Ile Pro Ala Val Lys Thr Ile Val Ile Leu Ile Met Arg Leu Val						
	355		360		365	
Asp Ala Asp Glu Leu Thr Gly Leu Cys Tyr Val Gly Asn Gln Asn Leu						
	370		375		380	
Asp Ala Leu Thr Gly Phe Val Val Ala Pro Leu Phe Thr Tyr Leu Val						
385		390		395		400
Ile Gly Thr Leu Phe Ile Ala Ala Gly Leu Val Ala Leu Phe Lys Ile						
	405		410		415	
Arg Ser Asn Leu Gln Lys Asp Gly Thr Lys Thr Asp Lys Leu Glu Arg						
	420		425		430	
Leu Met Val Lys Ile Gly Val Phe Ser Val Leu Tyr Thr Val Pro Ala						
	435		440		445	
Thr Cys Val Ile Ala Cys Tyr Phe Tyr Glu Ile Ser Asn Trp Ala Leu						
	450		455		460	
Phe Arg Tyr Ser Ala Asp Ser Asn Met Ala Val Glu Met Leu Lys						
465		470		475		480
Ile Phe Met Ser Leu Leu Val Gly Ile Thr Ser Gly Met Trp Ile Trp						
	485		490		495	
Ser Ala Lys Thr Leu His Thr Trp Gln Lys Cys Ser Asn Arg Leu Val						
	500		505		510	
Asn Ser Gly Lys Val Lys Arg Glu Lys Arg Gly Asn Gly Trp Val Lys						
	515		520		525	
Pro Gly Lys Gly Ser Glu Thr Val Val						
530		535				

<210> 50
 <211> 537
 <212> PRT
 <213> Mouse

<400> 50
 Met Ala Trp Pro Gly Thr Gly Pro Ser Ser Arg Gly Ala Pro Gly Gly
 1 5 10 15
 Val Gly Leu Arg Leu Gly Leu Leu Leu Gln Phe Leu Leu Leu Leu Arg
 20 25 30
 Pro Thr Leu Gly Phe Gly Asp Glu Glu Glu Arg Arg Cys Asp Pro Ile
 35 40 45
 Arg Ile Ala Met Cys Gln Asn Leu Gly Tyr Asn Val Thr Lys Met Pro
 50 55 60
 Asn Leu Val Gly His Glu Leu Gln Thr Asp Ala Glu Leu Gln Leu Thr
 65 70 75 80
 Thr Phe Thr Pro Leu Ile Gln Tyr Gly Cys Ser Ser Gln Leu Gln Phe

				85					90				95				
Phe	Leu	Cys	Ser	Val	Tyr	Val	Pro	Met	Cys	Thr	Glu	Lys	Ile	Asn	Ile		
			100					105					110				
Pro	Ile	Gly	Pro	Cys	Gly	Gly	Met	Cys	Leu	Ser	Val	Lys	Arg	Arg	Cys		
		115					120					125					
Glu	Pro	Val	Leu	Arg	Glu	Phe	Gly	Phe	Ala	Trp	Pro	Asp	Thr	Leu	Asn		
		130				135					140						
Cys	Ser	Lys	Phe	Pro	Pro	Gln	Asn	Asp	His	Asn	His	Met	Cys	Met	Glu		
145					150					155					160		
Gly	Pro	Gly	Asp	Glu	Glu	Val	Pro	Leu	Pro	His	Lys	Thr	Pro	Ile	Gln		
			165						170						175		
Pro	Gly	Glu	Glu	Cys	His	Ser	Val	Gly	Ser	Asn	Ser	Asp	Gln	Tyr	Ile		
			180					185					190				
Trp	Val	Lys	Arg	Ser	Leu	Asn	Cys	Val	Leu	Lys	Cys	Gly	Tyr	Asp	Ala		
		195					200					205					
Gly	Leu	Tyr	Ser	Arg	Ser	Ala	Lys	Glu	Phe	Thr	Asp	Ile	Trp	Met	Ala		
		210				215					220						
Val	Trp	Ala	Ser	Leu	Cys	Phe	Ile	Ser	Thr	Thr	Phe	Thr	Val	Leu	Thr		
225					230					235					240		
Phe	Leu	Ile	Asp	Ser	Ser	Arg	Phe	Ser	Tyr	Pro	Glu	Arg	Pro	Ile	Ile		
			245					250						255			
Phe	Leu	Ser	Met	Cys	Tyr	Asn	Ile	Tyr	Ser	Ile	Ala	Tyr	Ile	Val	Arg		
			260					265					270				
Leu	Thr	Val	Gly	Arg	Glu	Arg	Ile	Ser	Cys	Asp	Phe	Glu	Glu	Ala	Ala		
		275					280					285					
Glu	Pro	Val	Leu	Ile	Gln	Glu	Gly	Leu	Lys	Asn	Thr	Gly	Cys	Ala	Ile		
		290				295					300						
Ile	Phe	Leu	Leu	Met	Tyr	Phe	Phe	Gly	Met	Ala	Ser	Ser	Ile	Trp	Trp		
305					310					315				320			
Val	Ile	Leu	Thr	Leu	Thr	Trp	Phe	Leu	Ala	Ala	Gly	Leu	Lys	Trp	Gly		
			325					330					335				
His	Glu	Ala	Ile	Glu	Met	His	Ser	Ser	Tyr	Phe	His	Ile	Ala	Ala	Trp		
			340					345					350				
Ala	Ile	Pro	Ala	Val	Lys	Thr	Ile	Val	Ile	Leu	Ile	Met	Arg	Leu	Val		
		355					360					365					
Asp	Ala	Asp	Glu	Leu	Thr	Gly	Leu	Cys	Tyr	Val	Gly	Asn	Gln	Asn	Leu		
		370				375					380						
Asp	Ala	Leu	Thr	Gly	Phe	Val	Val	Ala	Pro	Leu	Phe	Thr	Tyr	Leu	Val		
385					390				395					400			
Ile	Gly	Thr	Leu	Phe	Ile	Ala	Ala	Gly	Leu	Val	Ala	Leu	Phe	Lys	Ile		
			405					410					415				
Arg	Ser	Asn	Leu	Gln	Lys	Asp	Gly	Thr	Lys	Thr	Asp	Lys	Leu	Glu	Arg		
			420					425					430				
Leu	Met	Val	Lys	Ile	Gly	Val	Phe	Ser	Val	Leu	Tyr	Thr	Val	Pro	Ala		
		435					440					445					
Thr	Cys	Val	Ile	Ala	Cys	Tyr	Phe	Tyr	Glu	Ile	Ser	Asn	Trp	Ala	Leu		
		450				455					460						
Phe	Arg	Tyr	Ser	Ala	Asp	Ser	Asn	Met	Ala	Val	Glu	Met	Leu	Lys			
465					470				475					480			
Ile	Phe	Met	Ser	Leu	Leu	Val	Gly	Ile	Thr	Ser	Gly	Met	Trp	Ile	Trp		
			485					490					495				
Ser	Ala	Lys	Thr	Leu	His	Thr	Trp	Gln	Lys	Cys	Ser	Asn	Arg	Leu	Val		
			500					505					510				
Asn	Ser	Gly	Lys	Val	Lys	Arg	Glu	Lys	Arg	Gly	Asn	Gly	Trp	Val	Lys		
		515					520					525					
Pro	Gly	Lys	Gly	Asn	Glu	Thr	Val	Val									
		530				535											

<210> 51
 <211> 585
 <212> PRT
 <213> Homo sapiens

<400> 51

Met	Ala	Arg	Pro	Asp	Pro	Ser	Ala	Pro	Pro	Ser	Leu	Leu	Leu	Leu	Leu
1			5						10				15		
Leu	Ala	Gln	Leu	Val	Gly	Arg	Ala	Ala	Ala	Ala	Ser	Lys	Ala	Pro	Val
		20						25				30			
Cys	Gln	Glu	Ile	Thr	Val	Pro	Met	Cys	Arg	Gly	Ile	Gly	Tyr	Asn	Leu
		35					40				45				
Thr	His	Met	Pro	Asn	Gln	Phe	Asn	His	Asp	Thr	Gln	Asp	Glu	Ala	Gly
	50					55					60				
Leu	Glu	Val	His	Gln	Phe	Trp	Pro	Leu	Val	Glu	Ile	Gln	Cys	Ser	Pro
65					70					75				80	
Asp	Leu	Arg	Phe	Phe	Leu	Cys	Thr	Met	Tyr	Thr	Pro	Ile	Cys	Leu	Pro
			85						90				95		
Asp	Tyr	His	Lys	Pro	Leu	Pro	Pro	Cys	Arg	Ser	Val	Cys	Glu	Arg	Ala
			100					105					110		
Lys	Ala	Gly	Cys	Ser	Pro	Leu	Met	Arg	Gln	Tyr	Gly	Phe	Ala	Trp	Pro
		115					120					125			
Glu	Arg	Met	Ser	Cys	Asp	Arg	Leu	Pro	Val	Leu	Gly	Arg	Asp	Ala	Glu
	130					135					140				
Val	Leu	Cys	Met	Asp	Tyr	Asn	Arg	Ser	Glu	Ala	Thr	Thr	Ala	Pro	Pro
145					150					155				160	
Arg	Pro	Phe	Pro	Ala	Lys	Pro	Thr	Leu	Pro	Gly	Pro	Pro	Gly	Ala	Pro
			165						170					175	
Ala	Ser	Gly	Gly	Glu	Cys	Pro	Ala	Gly	Gly	Pro	Phe	Val	Cys	Lys	Cys
		180						185					190		
Arg	Glu	Pro	Phe	Val	Pro	Ile	Leu	Lys	Glu	Ser	His	Pro	Leu	Tyr	Asn
	195						200					205			
Lys	Val	Arg	Thr	Gly	Gln	Val	Pro	Asn	Cys	Ala	Val	Pro	Cys	Tyr	Gln
	210					215					220				
Pro	Ser	Phe	Ser	Ala	Asp	Glu	Arg	Thr	Phe	Ala	Thr	Phe	Trp	Ile	Gly
225					230					235				240	
Leu	Trp	Ser	Val	Leu	Cys	Phe	Ile	Ser	Thr	Ser	Thr	Thr	Val	Ala	Thr
			245						250					255	
Phe	Leu	Ile	Asp	Met	Asp	Thr	Phe	Arg	Tyr	Pro	Glu	Arg	Pro	Ile	Ile
		260					265						270		
Phe	Leu	Ser	Ala	Cys	Tyr	Leu	Cys	Val	Ser	Leu	Gly	Phe	Leu	Val	Arg
	275						280					285			
Leu	Val	Val	Gly	His	Ala	Ser	Val	Ala	Cys	Ser	Arg	Glu	His	Asn	His
	290					295					300				
Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Ala	Leu	Cys	Thr	Ile	Val	Phe	Leu
305					310					315				320	
Leu	Val	Tyr	Phe	Phe	Gly	Met	Ala	Ser	Ser	Ile	Trp	Trp	Val	Ile	Leu
			325						330					335	
Ser	Leu	Thr	Trp	Phe	Leu	Ala	Ala	Ala	Met	Lys	Trp	Gly	Asn	Glu	Ala
		340						345					350		
Ile	Ala	Gly	Tyr	Gly	Gln	Tyr	Phe	His	Leu	Ala	Ala	Trp	Leu	Ile	Pro
	355						360					365			
Ser	Val	Lys	Ser	Ile	Thr	Ala	Leu	Ala	Leu	Ser	Ser	Val	Asp	Gly	Asp
	370					375					380				
Pro	Val	Ala	Gly	Ile	Cys	Tyr	Val	Gly	Asn	Gln	Asn	Leu	Asn	Ser	Leu
385					390					395					400

Arg Arg Phe Val Leu Gly Pro Leu Val Leu Tyr Leu Leu Val Gly Thr
 405 410 415
 Leu Phe Leu Leu Ala Gly Phe Val Ser Leu Phe Arg Ile Arg Ser Val
 420 425 430
 Ile Lys Gln Gly Gly Thr Lys Thr Asp Lys Leu Glu Lys Leu Met Ile
 435 440 445
 Arg Ile Gly Ile Phe Thr Leu Leu Tyr Thr Val Pro Ala Ser Ile Val
 450 455 460
 Val Ala Cys Tyr Leu Tyr Glu Gln His Tyr Arg Glu Ser Trp Glu Ala
 465 470 475 480
 Ala Leu Thr Cys Ala Cys Pro Gly His Asp Thr Gly Gln Pro Arg Ala
 485 490 495
 Lys Pro Glu Tyr Trp Val Leu Met Leu Lys Tyr Phe Met Cys Leu Val
 500 505 510
 Val Gly Ile Thr Ser Gly Val Trp Ile Trp Ser Gly Lys Thr Val Glu
 515 520 525
 Ser Trp Arg Arg Phe Thr Ser Arg Cys Cys Cys Arg Pro Arg Arg Gly
 530 535 540
 His Lys Ser Gly Gly Ala Met Ala Ala Gly Asp Tyr Pro Glu Ala Ser
 545 550 555 560
 Ala Ala Leu Thr Gly Arg Thr Gly Pro Pro Gly Pro Ala Ala Thr Tyr
 565 570 575
 His Lys Gln Val Ser Leu Ser His Val
 580 585

<210> 52
 <211> 706
 <212> PRT
 <213> Homo sapiens

<400> 52
 Met Glu Met Phe Thr Phe Leu Leu Thr Cys Ile Phe Leu Pro Leu Leu
 1 5 10 15
 Arg Gly His Ser Leu Phe Thr Cys Glu Pro Ile Thr Val Pro Arg Cys
 20 25 30
 Met Lys Met Ala Tyr Asn Met Thr Phe Phe Pro Asn Leu Met Gly His
 35 40 45
 Tyr Asp Gln Ser Ile Ala Ala Val Glu Met Glu His Phe Leu Pro Leu
 50 55 60
 Ala Asn Leu Glu Cys Ser Pro Asn Ile Glu Thr Phe Leu Cys Lys Ala
 65 70 75 80
 Phe Val Pro Thr Cys Ile Glu Gln Ile His Val Val Pro Pro Cys Arg
 85 90 95
 Lys Leu Cys Glu Lys Val Tyr Ser Asp Cys Lys Lys Leu Ile Asp Thr
 100 105 110
 Phe Gly Ile Arg Trp Pro Glu Glu Leu Glu Cys Asp Arg Leu Gln Tyr
 115 120 125
 Cys Asp Glu Thr Val Pro Val Thr Phe Asp Pro His Thr Glu Phe Leu
 130 135 140
 Gly Pro Gln Lys Lys Thr Glu Gln Val Gln Arg Asp Ile Gly Phe Trp
 145 150 155 160
 Cys Pro Arg His Leu Lys Thr Ser Gly Gly Gln Gly Tyr Lys Phe Leu
 165 170 175
 Gly Ile Asp Gln Cys Ala Pro Pro Cys Pro Asn Met Tyr Phe Lys Ser
 180 185 190
 Asp Glu Leu Glu Phe Ala Lys Ser Phe Ile Gly Thr Val Ser Ile Phe
 195 200 205

Cys	Leu	Cys	Ala	Thr	Leu	Phe	Thr	Phe	Leu	Thr	Phe	Leu	Ile	Asp	Val
210						215					220				
Arg	Arg	Phe	Arg	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Tyr	Tyr	Ser	Val	Cys
225					230					235					240
Tyr	Ser	Ile	Val	Ser	Leu	Met	Tyr	Phe	Ile	Gly	Phe	Leu	Leu	Gly	Asp
				245					250					255	
Ser	Thr	Ala	Cys	Asn	Lys	Ala	Asp	Glu	Lys	Leu	Glu	Leu	Gly	Asp	Thr
			260					265					270		
Val	Val	Leu	Gly	Ser	Gln	Asn	Lys	Ala	Cys	Thr	Val	Leu	Phe	Met	Leu
		275					280					285			
Leu	Tyr	Phe	Phe	Thr	Met	Ala	Gly	Thr	Val	Trp	Trp	Val	Ile	Leu	Thr
	290					295					300				
Ile	Thr	Trp	Phe	Leu	Ala	Ala	Gly	Arg	Lys	Trp	Ser	Cys	Glu	Ala	Ile
305					310					315					320
Glu	Gln	Lys	Ala	Val	Trp	Phe	His	Ala	Val	Ala	Trp	Gly	Thr	Pro	Gly
			325						330					335	
Phe	Leu	Thr	Val	Met	Leu	Leu	Ala	Met	Asn	Lys	Val	Glu	Gly	Asp	Asn
			340					345					350		
Ile	Ser	Gly	Val	Cys	Phe	Val	Gly	Leu	Tyr	Asp	Leu	Asp	Ala	Ser	Arg
		355					360				365				
Tyr	Phe	Val	Leu	Leu	Pro	Leu	Cys	Leu	Cys	Val	Phe	Val	Gly	Leu	Ser
	370					375					380				
Leu	Leu	Leu	Ala	Gly	Ile	Ile	Ser	Leu	Asn	His	Val	Arg	Gln	Val	Ile
385					390					395					400
Gln	His	Asp	Gly	Arg	Asn	Gln	Glu	Lys	Leu	Lys	Lys	Phe	Met	Ile	Arg
			405						410					415	
Ile	Gly	Val	Phe	Ser	Gly	Leu	Tyr	Leu	Val	Pro	Leu	Val	Thr	Leu	Leu
		420						425					430		
Gly	Cys	Tyr	Val	Tyr	Glu	Gln	Val	Asn	Arg	Ile	Thr	Trp	Glu	Ile	Thr
		435				440						445			
Trp	Val	Ser	Asp	His	Cys	Arg	Gln	Tyr	His	Ile	Pro	Cys	Pro	Tyr	Gln
	450					455					460				
Ala	Lys	Ala	Lys	Ala	Arg	Pro	Glu	Leu	Ala	Leu	Phe	Met	Ile	Lys	Tyr
465					470					475					480
Leu	Met	Thr	Leu	Ile	Val	Gly	Ile	Ser	Ala	Val	Phe	Trp	Val	Gly	Ser
			485						490					495	
Lys	Lys	Thr	Cys	Thr	Glu	Trp	Ala	Gly	Phe	Phe	Lys	Arg	Asn	Arg	Lys
		500						505					510		
Arg	Asp	Pro	Ile	Ser	Glu	Ser	Arg	Arg	Val	Leu	Gln	Glu	Ser	Cys	Glu
		515					520					525			
Phe	Phe	Leu	Lys	His	Asn	Ser	Lys	Val	Lys	His	Lys	Lys	Lys	His	Tyr
	530					535					540				
Lys	Pro	Ser	Ser	His	Lys	Leu	Lys	Val	Ile	Ser	Lys	Ser	Met	Gly	Thr
545					550					555					560
Ser	Thr	Gly	Ala	Thr	Ala	Asn	His	Gly	Thr	Ser	Ala	Val	Ala	Ile	Thr
			565						570					575	
Ser	His	Asp	Tyr	Leu	Gly	Gln	Glu	Thr	Leu	Thr	Glu	Ile	Gln	Thr	Ser
		580						585					590		
Pro	Glu	Thr	Ser	Met	Arg	Glu	Val	Lys	Ala	Asp	Gly	Ala	Ser	Thr	Pro
		595					600					605			
Arg	Leu	Arg	Glu	Gln	Asp	Cys	Gly	Glu	Pro	Ala	Ser	Pro	Ala	Ala	Ser
	610					615					620				
Ile	Ser	Arg	Leu	Ser	Gly	Glu	Gln	Val	Asp	Gly	Lys	Gly	Gln	Ala	Gly
625					630					635					640
Ser	Val	Ser	Glu	Ser	Ala	Arg	Ser	Glu	Gly	Arg	Ile	Ser	Pro	Lys	Ser
			645						650					655	
Asp	Ile	Thr	Asp	Thr	Gly	Leu	Ala	Gln	Ser	Asn	Asn	Leu	Gln	Val	Pro

			660					665				670			
Ser	Ser	Ser	Glu	Pro	Ser	Ser	Leu	Lys	Gly	Ser	Thr	Ser	Leu	Leu	Val
		675					680					685			
His	Pro	Val	Ser	Gly	Val	Arg	Lys	Glu	Gln	Gly	Gly	Gly	Cys	His	Ser
	690					695					700				
Asp	Thr														
705															

<210> 53
 <211> 709
 <212> PRT
 <213> Mouse

<400> 53

Met	Glu	Arg	Ser	Pro	Phe	Leu	Leu	Ala	Cys	Ile	Leu	Leu	Pro	Leu	Val
1				5					10					15	
Arg	Gly	His	Ser	Leu	Phe	Thr	Cys	Glu	Pro	Ile	Thr	Val	Pro	Arg	Cys
			20					25					30		
Met	Lys	Met	Thr	Tyr	Asn	Met	Thr	Phe	Phe	Pro	Asn	Leu	Met	Gly	His
	35						40					45			
Tyr	Asp	Gln	Gly	Ile	Ala	Ala	Val	Glu	Met	Gly	His	Phe	Leu	His	Leu
	50					55					60				
Ala	Asn	Leu	Glu	Cys	Ser	Pro	Asn	Ile	Glu	Met	Phe	Leu	Cys	Gln	Ala
65					70					75					80
Phe	Ile	Pro	Thr	Cys	Thr	Glu	Gln	Ile	His	Val	Val	Leu	Pro	Cys	Arg
				85					90					95	
Lys	Leu	Cys	Glu	Lys	Ile	Val	Ser	Asp	Cys	Lys	Lys	Leu	Met	Asp	Thr
			100					105					110		
Phe	Gly	Ile	Arg	Trp	Pro	Glu	Glu	Leu	Glu	Cys	Asn	Arg	Leu	Pro	His
	115					120						125			
Cys	Asp	Asp	Thr	Val	Pro	Val	Thr	Ser	His	Pro	His	Thr	Glu	Leu	Ser
	130					135					140				
Gly	Pro	Gln	Lys	Lys	Ser	Asp	Gln	Val	Pro	Arg	Asp	Ile	Gly	Phe	Trp
145					150					155					160
Cys	Pro	Lys	His	Leu	Arg	Thr	Ser	Gly	Asp	Gln	Gly	Tyr	Arg	Phe	Leu
				165					170					175	
Gly	Ile	Glu	Gln	Cys	Ala	Pro	Pro	Cys	Pro	Asn	Met	Tyr	Phe	Lys	Ser
			180					185					190		
Asp	Glu	Leu	Asp	Phe	Ala	Lys	Ser	Phe	Ile	Gly	Ile	Val	Ser	Ile	Phe
	195					200						205			
Cys	Leu	Cys	Ala	Thr	Leu	Phe	Thr	Phe	Leu	Thr	Phe	Leu	Ile	Asp	Val
	210					215					220				
Arg	Arg	Phe	Arg	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Tyr	Tyr	Ser	Val	Cys
225					230					235					240
Tyr	Ser	Ile	Val	Ser	Leu	Met	Tyr	Phe	Val	Gly	Phe	Leu	Leu	Gly	Asn
				245					250					255	
Ser	Thr	Ala	Cys	Asn	Lys	Ala	Asp	Glu	Lys	Leu	Glu	Leu	Gly	Asp	Thr
			260					265					270		
Val	Val	Leu	Gly	Ser	Lys	Asn	Lys	Ala	Cys	Ser	Val	Val	Phe	Met	Phe
			275				280						285		
Leu	Tyr	Phe	Phe	Thr	Met	Ala	Gly	Thr	Val	Trp	Trp	Val	Ile	Leu	Thr
	290					295						300			
Ile	Thr	Trp	Phe	Leu	Ala	Ala	Gly	Arg	Lys	Trp	Ser	Cys	Glu	Ala	Ile
305					310					315					320
Glu	Gln	Lys	Ala	Val	Trp	Phe	His	Ala	Val	Ala	Trp	Gly	Ala	Pro	Gly
				325					330					335	
Phe	Leu	Thr	Val	Met	Leu	Leu	Ala	Met	Asn	Lys	Val	Glu	Gly	Asp	Asn

			340					345					350				
Ile	Ser	Gly	Val	Cys	Phe	Val	Gly	Leu	Tyr	Asp	Leu	Asp	Ala	Ser	Arg		
		355					360					365					
Tyr	Phe	Val	Leu	Leu	Pro	Leu	Cys	Leu	Cys	Val	Phe	Val	Gly	Leu	Ser		
		370					375					380					
Leu	Leu	Leu	Ala	Gly	Ile	Ile	Ser	Leu	Asn	His	Val	Arg	Gln	Val	Ile		
385					390					395					400		
Gln	His	Asp	Gly	Arg	Asn	Gln	Glu	Lys	Leu	Lys	Lys	Phe	Met	Ile	Arg		
			405						410					415			
Ile	Gly	Val	Phe	Ser	Gly	Leu	Tyr	Leu	Val	Pro	Leu	Val	Thr	Leu	Leu		
		420						425					430				
Gly	Cys	Tyr	Val	Tyr	Glu	Leu	Val	Asn	Arg	Ile	Thr	Trp	Glu	Met	Thr		
		435					440					445					
Trp	Phe	Ser	Asp	His	Cys	His	Gln	Tyr	Arg	Ile	Pro	Cys	Pro	Tyr	Gln		
	450					455					460						
Ala	Asn	Pro	Lys	Ala	Arg	Pro	Glu	Leu	Ala	Leu	Phe	Met	Ile	Lys	Tyr		
465					470					475					480		
Leu	Met	Thr	Leu	Ile	Val	Gly	Ile	Ser	Ala	Val	Phe	Trp	Val	Gly	Ser		
			485						490					495			
Lys	Lys	Thr	Cys	Thr	Glu	Trp	Ala	Gly	Phe	Phe	Lys	Arg	Asn	Arg	Lys		
		500						505					510				
Arg	Asp	Pro	Ile	Ser	Glu	Ser	Arg	Arg	Val	Leu	Gln	Glu	Ser	Cys	Glu		
		515					520					525					
Phe	Phe	Leu	Lys	His	Asn	Ser	Lys	Val	Lys	His	Lys	Lys	Lys	His	Gly		
	530					535					540						
Ala	Pro	Gly	Pro	His	Arg	Leu	Lys	Val	Ile	Ser	Lys	Ser	Met	Gly	Thr		
545					550					555					560		
Ser	Thr	Gly	Ala	Thr	Asn	His	Gly	Thr	Ser	Ala	Met	Ala	Ile	Ala			
			565					570					575				
Asp	His	Asp	Tyr	Leu	Gly	Gln	Glu	Thr	Ser	Thr	Glu	Val	His	Thr	Ser		
		580						585					590				
Pro	Glu	Ala	Ser	Val	Lys	Glu	Gly	Arg	Ala	Asp	Arg	Ala	Asn	Thr	Pro		
		595					600					605					
Ser	Ala	Lys	Asp	Arg	Asp	Cys	Gly	Glu	Ser	Ala	Gly	Pro	Ser	Ser	Lys		
	610					615					620						
Leu	Ser	Gly	Asn	Arg	Asn	Gly	Arg	Glu	Ser	Arg	Ala	Gly	Gly	Leu	Lys		
625					630					635					640		
Glu	Arg	Ser	Asn	Gly	Ser	Glu	Gly	Ala	Pro	Ser	Glu	Gly	Arg	Val	Ser		
			645					650					655				
Pro	Lys	Ser	Ser	Val	Pro	Glu	Thr	Gly	Leu	Ile	Asp	Cys	Ser	Thr	Ser		
		660						665					670				
Gln	Ala	Ala	Ser	Ser	Pro	Glu	Pro	Thr	Ser	Leu	Lys	Gly	Ser	Thr	Ser		
		675					680					685					
Leu	Pro	Val	His	Ser	Ala	Ser	Arg	Ala	Arg	Lys	Glu	Gln	Gly	Ala	Gly		
	690					695					700						
Ser	His	Ser	Asp	Ala													
705																	

<210> 54

<211> 574

<212> PRT

<213> Homo sapiens

<400> 54

Met Arg Asp Pro Gly Ala Ala Ala Pro Leu Ser Ser Leu Gly Leu Cys

1

5

10

15

Ala Leu Val Leu Ala Leu Leu Gly Ala Leu Ser Ala Gly Ala Gly Ala

			20					25					30			
Gln	Pro	Tyr	His	Gly	Glu	Lys	Gly	Ile	Ser	Val	Pro	Asp	His	Gly	Phe	
		35					40					45				
Cys	Gln	Pro	Ile	Ser	Ile	Pro	Leu	Cys	Thr	Asp	Ile	Ala	Tyr	Asn	Gln	
	50					55					60					
Thr	Ile	Leu	Pro	Asn	Leu	Leu	Gly	His	Thr	Asn	Gln	Glu	Asp	Ala	Gly	
65					70					75					80	
Leu	Glu	Val	His	Gln	Phe	Tyr	Pro	Leu	Val	Lys	Val	Gln	Cys	Ser	Pro	
				85					90					95		
Glu	Leu	Arg	Phe	Phe	Leu	Cys	Ser	Met	Tyr	Ala	Pro	Val	Cys	Thr	Val	
			100					105						110		
Leu	Asp	Gln	Ala	Ile	Pro	Pro	Cys	Arg	Ser	Leu	Cys	Glu	Arg	Ala	Arg	
	115						120					125				
Gln	Gly	Cys	Glu	Ala	Leu	Met	Asn	Lys	Phe	Gly	Phe	Gln	Trp	Pro	Glu	
	130					135					140					
Arg	Leu	Arg	Cys	Glu	Asn	Phe	Pro	Val	His	Gly	Ala	Gly	Glu	Ile	Cys	
145					150					155					160	
Val	Gly	Gln	Asn	Thr	Ser	Asp	Gly	Ser	Gly	Gly	Pro	Gly	Gly	Gly	Pro	
				165					170					175		
Thr	Ala	Tyr	Pro	Thr	Ala	Pro	Tyr	Leu	Pro	Asp	Leu	Pro	Phe	Thr	Ala	
			180					185					190			
Leu	Pro	Pro	Gly	Ala	Ser	Asp	Gly	Arg	Gly	Arg	Pro	Ala	Phe	Pro	Phe	
	195						200					205				
Ser	Cys	Pro	Arg	Gln	Leu	Lys	Val	Pro	Pro	Tyr	Leu	Gly	Tyr	Arg	Phe	
	210					215						220				
Leu	Gly	Glu	Arg	Asp	Cys	Gly	Ala	Pro	Cys	Glu	Pro	Gly	Arg	Ala	Asn	
225					230					235					240	
Gly	Leu	Met	Tyr	Phe	Lys	Glu	Glu	Glu	Arg	Arg	Phe	Ala	Arg	Leu	Trp	
				245					250					255		
Val	Gly	Val	Trp	Ser	Val	Leu	Cys	Cys	Ala	Ser	Thr	Leu	Phe	Thr	Val	
			260					265					270			
Leu	Thr	Tyr	Leu	Val	Asp	Met	Arg	Arg	Phe	Ser	Tyr	Pro	Glu	Arg	Pro	
		275					280					285				
Ile	Ile	Phe	Leu	Ser	Gly	Cys	Tyr	Phe	Met	Val	Ala	Val	Ala	His	Val	
	290					295					300					
Ala	Gly	Phe	Leu	Leu	Glu	Asp	Arg	Ala	Val	Cys	Val	Glu	Arg	Phe	Ser	
305					310					315					320	
Asp	Asp	Gly	Tyr	Arg	Thr	Val	Ala	Gln	Gly	Thr	Lys	Lys	Glu	Gly	Cys	
				325					330					335		
Thr	Ile	Leu	Phe	Met	Val	Leu	Tyr	Phe	Phe	Gly	Met	Ala	Ser	Ser	Ile	
			340					345					350			
Trp	Trp	Val	Ile	Leu	Ser	Leu	Thr	Trp	Phe	Leu	Ala	Ala	Gly	Met	Lys	
	355						360					365				
Trp	Gly	His	Glu	Ala	Ile	Glu	Ala	Asn	Ser	Gln	Tyr	Phe	His	Leu	Ala	
	370					375					380					
Ala	Trp	Ala	Val	Pro	Ala	Val	Lys	Thr	Ile	Thr	Ile	Leu	Ala	Met	Gly	
385					390					395					400	
Gln	Val	Asp	Gly	Asp	Leu	Leu	Ser	Gly	Val	Cys	Tyr	Val	Gly	Leu	Ser	
				405					410					415		
Ser	Val	Asp	Ala	Leu	Arg	Gly	Phe	Val	Leu	Ala	Pro	Leu	Phe	Val	Tyr	
			420					425					430			
Leu	Phe	Ile	Gly	Thr	Ser	Phe	Leu	Leu	Ala	Gly	Phe	Val	Ser	Leu	Phe	
	435						440					445				
Arg	Ile	Arg	Thr	Ile	Met	Lys	His	Asp	Gly	Thr	Lys	Thr	Glu	Lys	Leu	
	450					455					460					
Glu	Lys	Leu	Met	Val	Arg	Ile	Gly	Val	Phe	Ser	Val	Leu	Tyr	Thr	Val	
465					470					475					480	

Phe Leu Leu Glu Asp Arg Ala Val Cys Val Glu Arg Phe Ser Asp Asp
 305 310 315 320
 Gly Tyr Arg Thr Val Ala Gln Gly Thr Lys Lys Glu Gly Cys Thr Ile
 325 330 335
 Leu Phe Met Val Leu Tyr Phe Phe Gly Met Ala Ser Ser Ile Trp Trp
 340 345 350
 Val Ile Leu Ser Leu Thr Trp Phe Leu Ala Ala Gly Met Lys Trp Gly
 355 360 365
 His Glu Ala Ile Glu Ala Asn Ser Gln Tyr Phe His Leu Ala Ala Trp
 370 375 380
 Ala Val Pro Ala Val Lys Thr Ile Thr Ile Leu Ala Met Gly Gln Val
 385 390 395 400
 Asp Gly Asp Leu Leu Ser Gly Val Cys Tyr Val Gly Leu Ser Ser Val
 405 410 415
 Asp Ala Leu Arg Gly Phe Val Leu Ala Pro Leu Phe Val Tyr Leu Phe
 420 425 430
 Ile Gly Thr Ser Phe Leu Leu Ala Gly Phe Val Ser Leu Phe Arg Ile
 435 440 445
 Arg Thr Ile Met Lys His Asp Gly Thr Lys Thr Glu Lys Leu Glu Lys
 450 455 460
 Leu Met Val Arg Ile Gly Val Phe Ser Val Leu Tyr Thr Val Pro Ala
 465 470 475 480
 Thr Ile Val Leu Ala Cys Tyr Phe Tyr Glu Gln Ala Phe Arg Glu His
 485 490 495
 Trp Glu Arg Thr Trp Leu Leu Gln Thr Cys Lys Ser Tyr Ala Val Pro
 500 505 510
 Cys Pro Pro Arg His Phe Ser Pro Met Ser Pro Asp Phe Thr Val Phe
 515 520 525
 Met Ile Lys Tyr Leu Met Thr Met Ile Val Gly Ile Thr Thr Gly Phe
 530 535 540
 Trp Ile Trp Ser Gly Lys Thr Leu Gln Ser Trp Arg Arg Phe Tyr His
 545 550 555 560
 Arg Leu Ser His Ser Ser Lys Gly Glu Thr Ala Val
 565 570

<210> 56
 <211> 694
 <212> PRT
 <213> Homo sapiens

<400> 56
 Met Glu Trp Gly Tyr Leu Leu Glu Val Thr Ser Leu Leu Ala Ala Leu
 1 5 10 15
 Ala Leu Leu Gln Arg Ser Ser Gly Ala Ala Ala Ala Ser Ala Lys Glu
 20 25 30
 Leu Ala Cys Gln Glu Ile Thr Val Pro Leu Cys Lys Gly Ile Gly Tyr
 35 40 45
 Asn Tyr Thr Tyr Met Pro Asn Gln Phe Asn His Asp Thr Gln Asp Glu
 50 55 60
 Ala Gly Leu Glu Val His Gln Phe Trp Pro Leu Val Glu Ile Gln Cys
 65 70 75 80
 Ser Pro Asp Leu Lys Phe Phe Leu Cys Ser Met Tyr Thr Pro Ile Cys
 85 90 95
 Leu Glu Asp Tyr Lys Lys Pro Leu Pro Pro Cys Arg Ser Val Cys Glu
 100 105 110
 Arg Ala Lys Ala Gly Cys Ala Pro Leu Met Arg Gln Tyr Gly Phe Ala
 115 120 125

Trp	Pro	Asp	Arg	Met	Arg	Cys	Asp	Arg	Leu	Pro	Glu	Gln	Gly	Asn	Pro
130						135					140				
Asp	Thr	Leu	Cys	Met	Asp	Tyr	Asn	Arg	Thr	Asp	Leu	Thr	Thr	Ala	Ala
145					150					155					160
Pro	Ser	Pro	Pro	Arg	Arg	Leu	Pro	Pro	Pro	Pro	Pro	Gly	Glu	Gln	Pro
				165					170						175
Pro	Ser	Gly	Ser	Gly	His	Gly	Arg	Pro	Pro	Gly	Ala	Arg	Pro	Pro	His
			180					185					190		
Arg	Gly	Gly	Gly	Arg	Gly	Gly	Gly	Gly	Gly	Asp	Ala	Ala	Ala	Pro	Pro
		195					200					205			
Ala	Arg	Gly	Gly	Gly	Gly	Gly	Lys	Ala	Arg	Pro	Pro	Gly	Gly	Gly	
210						215				220					
Ala	Ala	Pro	Cys	Glu	Pro	Gly	Cys	Gln	Cys	Arg	Ala	Pro	Met	Val	Ser
225					230					235					240
Val	Ser	Ser	Glu	Arg	His	Pro	Leu	Tyr	Asn	Arg	Val	Lys	Thr	Gly	Gln
				245					250						255
Ile	Ala	Asn	Cys	Ala	Leu	Pro	Cys	His	Asn	Pro	Phe	Phe	Ser	Gln	Asp
			260					265					270		
Glu	Arg	Ala	Phe	Thr	Val	Phe	Trp	Ile	Gly	Leu	Trp	Ser	Val	Leu	Cys
		275					280					285			
Phe	Val	Ser	Thr	Phe	Ala	Thr	Val	Ser	Thr	Phe	Leu	Ile	Asp	Met	Glu
290						295					300				
Arg	Phe	Lys	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Phe	Leu	Ser	Ala	Cys	Tyr
305					310					315					320
Leu	Phe	Val	Ser	Val	Gly	Tyr	Leu	Val	Arg	Leu	Val	Ala	Gly	His	Glu
				325					330					335	
Lys	Val	Ala	Cys	Ser	Gly	Gly	Ala	Pro	Gly	Ala	Gly	Gly	Ala	Gly	Gly
			340					345					350		
Ala	Gly	Gly	Ala	Ala	Ala	Gly	Ala	Gly	Ala	Ala	Gly	Ala	Gly	Ala	Gly
		355					360					365			
Gly	Pro	Gly	Gly	Arg	Gly	Glu	Tyr	Glu	Glu	Leu	Gly	Ala	Val	Glu	Gln
370						375					380				
His	Val	Arg	Tyr	Glu	Thr	Thr	Gly	Pro	Ala	Leu	Cys	Thr	Val	Val	Phe
385					390					395					400
Leu	Leu	Val	Tyr	Phe	Phe	Gly	Met	Ala	Ser	Ser	Ile	Trp	Trp	Val	Ile
				405					410					415	
Leu	Ser	Leu	Thr	Trp	Phe	Leu	Ala	Ala	Gly	Met	Lys	Trp	Gly	Asn	Glu
			420					425					430		
Ala	Ile	Ala	Gly	Tyr	Ser	Gln	Tyr	Phe	His	Leu	Ala	Ala	Trp	Leu	Val
		435					440					445			
Pro	Ser	Val	Lys	Ser	Ile	Ala	Val	Leu	Ala	Leu	Ser	Ser	Val	Asp	Gly
450						455					460				
Asp	Pro	Val	Ala	Gly	Ile	Cys	Tyr	Val	Gly	Asn	Gln	Ser	Leu	Asp	Asn
465					470					475					480
Leu	Arg	Gly	Phe	Val	Leu	Ala	Pro	Leu	Val	Ile	Tyr	Leu	Phe	Ile	Gly
				485					490					495	
Thr	Met	Phe	Leu	Ala	Gly	Phe	Val	Ser	Leu	Phe	Arg	Ile	Arg	Ser	
			500				505					510			
Val	Ile	Lys	Gln	Gln	Asp	Gly	Pro	Thr	Lys	Thr	His	Lys	Leu	Glu	Lys
		515					520					525			
Leu	Met	Ile	Arg	Leu	Gly	Leu	Phe	Thr	Val	Leu	Tyr	Thr	Val	Pro	Ala
		530				535					540				
Ala	Val	Val	Val	Ala	Cys	Leu	Phe	Tyr	Glu	Gln	His	Asn	Arg	Pro	Arg
545					550					555					560
Trp	Glu	Ala	Thr	His	Asn	Cys	Pro	Cys	Leu	Arg	Asp	Leu	Gln	Pro	Asp
				565					570					575	
Gln	Ala	Arg	Arg	Pro	Asp	Tyr	Ala	Val	Phe	Met	Leu	Lys	Tyr	Phe	Met

			580					585				590					
Cys	Leu	Val	Val	Gly	Ile	Thr	Ser	Gly	Val	Trp	Val	Trp	Ser	Gly	Lys		
			595					600				605					
Thr	Leu	Glu	Ser	Trp	Arg	Ser	Leu	Cys	Thr	Arg	Cys	Cys	Trp	Ala	Ser		
			610					615				620					
Lys	Gly	Ala	Ala	Val	Gly	Gly	Gly	Ala	Gly	Ala	Thr	Ala	Ala	Gly	Gly		
625					630					635					640		
Gly	Gly	Gly	Pro	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Pro	Gly	Gly	Gly	Gly		
				645						650					655		
Gly	Pro	Gly	Gly	Gly	Gly	Gly	Ser	Leu	Tyr	Ser	Asp	Val	Ser	Thr	Gly		
			660						665					670			
Leu	Thr	Trp	Arg	Ser	Gly	Thr	Ala	Ser	Ser	Val	Ser	Tyr	Pro	Lys	Gln		
			675					680						685			
Met	Pro	Leu	Ser	Gln	Val												
			690														

<210> 57
 <211> 685
 <212> PRT
 <213> Mouse

<400> 57

Met	Glu	Trp	Gly	Tyr	Leu	Leu	Glu	Val	Thr	Ser	Leu	Leu	Ala	Ala	Leu		
1				5					10					15			
Ala	Val	Leu	Gln	Arg	Ser	Ser	Gly	Ala	Ala	Ala	Ala	Ser	Ala	Lys	Glu		
			20					25					30				
Leu	Ala	Cys	Gln	Glu	Ile	Thr	Val	Pro	Leu	Cys	Lys	Gly	Ile	Gly	Tyr		
		35					40					45					
Asn	Tyr	Thr	Tyr	Met	Pro	Asn	Gln	Phe	Asn	His	Asp	Thr	Gln	Asp	Glu		
50						55					60						
Ala	Gly	Leu	Glu	Val	His	Gln	Phe	Trp	Pro	Leu	Val	Glu	Ile	Gln	Cys		
65					70					75					80		
Ser	Pro	Asp	Leu	Lys	Phe	Phe	Leu	Cys	Ser	Met	Tyr	Thr	Pro	Ile	Cys		
				85					90					95			
Leu	Glu	Asp	Tyr	Lys	Lys	Pro	Leu	Pro	Pro	Cys	Arg	Ser	Val	Cys	Glu		
			100					105					110				
Arg	Ala	Lys	Ala	Gly	Cys	Ala	Pro	Leu	Met	Arg	Gln	Tyr	Gly	Phe	Ala		
		115					120					125					
Trp	Pro	Asp	Arg	Met	Arg	Cys	Asp	Arg	Leu	Pro	Glu	Gln	Gly	Asn	Pro		
		130				135					140						
Asp	Thr	Leu	Cys	Met	Asp	Tyr	Asn	Arg	Thr	Asp	Leu	Thr	Thr	Ala	Ala		
145					150					155					160		
Pro	Ser	Pro	Pro	Arg	Arg	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Gly	Glu	Gln		
				165					170					175			
Pro	Pro	Ser	Gly	Ser	Gly	His	Ser	Arg	Pro	Pro	Gly	Ala	Arg	Pro	Pro		
		180						185					190				
His	Arg	Gly	Gly	Ser	Ser	Arg	Gly	Ser	Gly	Asp	Ala	Ala	Ala	Ala	Pro		
		195					200					205					
Pro	Ser	Arg	Gly	Gly	Lys	Ala	Arg	Pro	Pro	Gly	Gly	Gly	Ala	Ala	Pro		
		210				215					220						
Cys	Glu	Pro	Gly	Cys	Gln	Cys	Arg	Ala	Pro	Met	Val	Ser	Val	Ser	Ser		
225					230					235					240		
Glu	Arg	His	Pro	Leu	Tyr	Asn	Arg	Val	Lys	Thr	Gly	Gln	Ile	Ala	Asn		
				245					250					255			
Cys	Ala	Leu	Pro	Cys	His	Asn	Pro	Phe	Phe	Ser	Gln	Asp	Glu	Arg	Ala		
		260						265					270				
Phe	Thr	Val	Phe	Trp	Ile	Gly	Leu	Trp	Ser	Val	Leu	Cys	Phe	Val	Ser		

275	280	285
Thr Phe Ala Thr Val Ser	Thr Phe Leu Ile Asp Met	Glu Arg Phe Lys
290	295	300
Tyr Pro Glu Arg Pro Ile	Ile Phe Leu Ser Ala Cys	Tyr Leu Phe Val
305	310	315
Ser Val Gly Tyr Leu Val Arg	Leu Val Ala Gly His	Glu Lys Val Ala
325	330	335
Cys Ser Gly Gly Ala Pro Gly	Ala Gly Gly Arg Gly	Gly Ala Gly Gly
340	345	350
Ala Ala Ala Ala Gly Ala Gly	Ala Ala Gly Arg Gly	Ala Ser Ser Pro
355	360	365
Gly Ala Arg Gly Glu Tyr Glu	Glu Leu Gly Ala Val	Glu Gln His Val
370	375	380
Arg Tyr Glu Thr Thr Gly	Pro Ala Leu Cys Thr	Val Val Phe Leu Leu
385	390	395
Val Tyr Phe Phe Gly Met	Ala Ser Ser Ile Trp	Trp Val Ile Leu Ser
405	410	415
Leu Thr Trp Phe Leu Ala Ala	Gly Met Lys Trp Gly	Asn Glu Ala Ile
420	425	430
Ala Gly Tyr Ser Gln Tyr Phe	His Leu Ala Ala Trp	Leu Val Pro Ser
435	440	445
Val Lys Ser Ile Ala Val Leu	Ala Leu Ser Ser Val	Asp Gly Asp Pro
450	455	460
Val Ala Gly Ile Cys Tyr Val	Gly Asn Gln Ser Leu	Asp Asn Leu Arg
465	470	475
Gly Phe Val Leu Ala Pro Leu	Val Ile Tyr Leu Phe	Ile Gly Thr Met
485	490	495
Phe Leu Leu Ala Gly Phe Val	Ser Leu Phe Arg Ile	Arg Ser Val Ile
500	505	510
Lys Gln Gln Gly Gly Pro Thr	Lys Thr His Lys Leu	Glu Lys Leu Met
515	520	525
Ile Arg Leu Gly Leu Phe Thr	Val Leu Tyr Thr Val	Pro Ala Ala Val
530	535	540
Val Val Ala Cys Leu Phe Tyr	Glu Gln His Asn Arg	Pro Arg Trp Glu
545	550	555
Ala Thr His Asn Cys Pro Cys	Leu Arg Asp Leu Gln	Pro Asp Gln Ala
565	570	575
Arg Arg Pro Asp Tyr Ala Val	Phe Met Leu Lys Tyr	Phe Met Cys Leu
580	585	590
Val Val Gly Ile Thr Ser Gly	Val Trp Val Trp Ser	Gly Lys Thr Leu
595	600	605
Glu Ser Trp Arg Ala Leu Cys	Thr Arg Cys Cys Trp	Ala Ser Lys Gly
610	615	620
Ala Ala Val Gly Ala Gly Ala	Gly Gly Ser Gly Pro	Gly Gly Ser Gly
625	630	635
Pro Gly Pro Gly Gly Gly Gly	His Gly Gly Gly Gly	Ser Leu
645	650	655
Tyr Ser Asp Val Ser Thr Gly	Leu Thr Trp Arg Ser	Gly Thr Ala Ser
660	665	670
Ser Val Ser Tyr Pro Lys Gln	Met Pro Leu Ser Gln	Val
675	680	685

<210> 58
 <211> 591
 <212> PRT
 <213> Homo sapiens

<400> 58

Met	Ala	Val	Ala	Pro	Leu	Arg	Gly	Ala	Leu	Leu	Leu	Trp	Gln	Leu	Leu
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Ala	Ala	Gly	Gly	Ala	Ala	Leu	Glu	Ile	Gly	Arg	Phe	Asp	Pro	Glu	Arg
			20					25					30		
Gly	Arg	Gly	Ala	Ala	Pro	Cys	Gln	Ala	Val	Glu	Ile	Pro	Met	Cys	Arg
		35					40					45			
Gly	Ile	Gly	Tyr	Asn	Leu	Thr	Arg	Met	Pro	Asn	Leu	Leu	Gly	His	Thr
	50					55					60				
Ser	Gln	Gly	Glu	Ala	Ala	Glu	Leu	Ala	Glu	Phe	Ala	Pro	Leu	Val	
65					70					75				80	
Gln	Tyr	Gly	Cys	His	Ser	His	Leu	Arg	Phe	Phe	Leu	Cys	Ser	Leu	Tyr
				85					90					95	
Ala	Pro	Met	Cys	Thr	Asp	Gln	Val	Ser	Thr	Pro	Ile	Pro	Ala	Cys	Arg
			100						105				110		
Pro	Met	Cys	Glu	Gln	Ala	Arg	Leu	Arg	Cys	Ala	Pro	Ile	Met	Glu	Gln
		115						120				125			
Phe	Asn	Phe	Gly	Trp	Pro	Asp	Ser	Leu	Asp	Cys	Ala	Arg	Leu	Pro	Thr
	130					135					140				
Arg	Asn	Asp	Pro	His	Ala	Leu	Cys	Met	Glu	Ala	Pro	Glu	Asn	Ala	Thr
145					150					155				160	
Ala	Gly	Pro	Ala	Glu	Pro	His	Lys	Gly	Leu	Gly	Met	Leu	Pro	Val	Ala
				165					170					175	
Pro	Arg	Pro	Ala	Arg	Pro	Pro	Gly	Asp	Leu	Gly	Pro	Gly	Ala	Gly	Gly
		180						185					190		
Ser	Gly	Thr	Cys	Glu	Asn	Pro	Glu	Lys	Phe	Gln	Tyr	Val	Glu	Lys	Ser
	195						200					205			
Arg	Ser	Cys	Ala	Pro	Arg	Cys	Gly	Pro	Gly	Val	Glu	Val	Phe	Trp	Ser
	210					215						220			
Arg	Arg	Asp	Lys	Asp	Phe	Ala	Leu	Val	Trp	Met	Ala	Val	Trp	Ser	Ala
225					230					235				240	
Leu	Cys	Phe	Phe	Ser	Thr	Ala	Phe	Thr	Val	Leu	Thr	Phe	Leu	Leu	Glu
				245					250				255		
Pro	His	Arg	Phe	Gln	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Phe	Leu	Ser	Met
		260						265					270		
Cys	Tyr	Asn	Val	Tyr	Ser	Leu	Ala	Phe	Leu	Ile	Arg	Ala	Val	Ala	Gly
	275						280					285			
Ala	Gln	Ser	Val	Ala	Cys	Asp	Gln	Glu	Ala	Gly	Ala	Leu	Tyr	Val	Ile
	290					295					300				
Gln	Glu	Gly	Leu	Glu	Asn	Thr	Gly	Cys	Thr	Leu	Val	Phe	Leu	Leu	Leu
305					310					315				320	
Tyr	Tyr	Phe	Gly	Met	Ala	Ser	Ser	Leu	Trp	Trp	Val	Val	Leu	Thr	Leu
			325						330				335		
Thr	Trp	Phe	Leu	Ala	Ala	Gly	Lys	Lys	Trp	Gly	His	Glu	Ala	Ile	Glu
		340						345					350		
Ala	His	Gly	Ser	Tyr	Phe	His	Met	Ala	Ala	Trp	Gly	Leu	Pro	Ala	Leu
		355					360					365			
Lys	Thr	Ile	Val	Ile	Leu	Thr	Leu	Arg	Lys	Val	Ala	Gly	Asp	Glu	Leu
	370					375					380				
Thr	Gly	Leu	Cys	Tyr	Val	Ala	Ser	Thr	Asp	Ala	Ala	Ala	Leu	Thr	Gly
385					390					395				400	
Phe	Val	Leu	Val	Pro	Leu	Ser	Gly	Tyr	Leu	Val	Leu	Gly	Ser	Ser	Phe
				405					410				415		
Leu	Leu	Thr	Gly	Phe	Val	Ala	Leu	Phe	His	Ile	Arg	Lys	Ile	Met	Lys
		420						425					430		
Thr	Gly	Gly	Thr	Asn	Thr	Glu	Lys	Leu	Glu	Lys	Leu	Met	Val	Lys	Ile
		435					440					445			

Gly Val Phe Ser Ile Leu Tyr Thr Val Pro Ala Thr Cys Val Ile Val
 450 455 460
 Cys Tyr Val Tyr Glu Arg Leu Asn Met Asp Phe Trp Arg Leu Arg Ala
 465 470 475 480
 Thr Glu Gln Pro Cys Ala Ala Ala Ala Gly Pro Gly Gly Arg Arg Asp
 485 490 495
 Cys Ser Leu Pro Gly Gly Ser Val Pro Thr Val Ala Val Phe Met Leu
 500 505 510
 Lys Ile Phe Met Ser Leu Val Val Gly Ile Thr Ser Gly Val Trp Val
 515 520 525
 Trp Ser Ser Lys Thr Phe Gln Thr Trp Gln Ser Leu Cys Tyr Arg Lys
 530 535 540
 Ile Ala Ala Gly Arg Ala Arg Ala Lys Ala Cys Arg Ala Pro Gly Ser
 545 550 555 560
 Tyr Gly Arg Gly Thr His Cys His Tyr Lys Ala Pro Thr Val Val Leu
 565 570 575
 His Met Thr Lys Thr Asp Pro Ser Leu Glu Asn Pro Thr His Leu
 580 585 590

<210> 59
 <211> 591
 <212> PRT
 <213> Mouse

<400> 59
 Met Ala Val Pro Pro Leu Leu Arg Gly Ala Leu Leu Leu Trp Gln Leu
 1 5 10 15
 Leu Ala Thr Gly Gly Ala Ala Leu Glu Ile Gly Arg Phe Asp Pro Glu
 20 25 30
 Arg Gly Arg Gly Pro Ala Pro Cys Gln Ala Met Glu Ile Pro Met Cys
 35 40 45
 Arg Gly Ile Gly Tyr Asn Leu Thr Arg Met Pro Asn Leu Leu Gly His
 50 55 60
 Thr Ser Gln Gly Glu Ala Ala Ala Gln Leu Ala Glu Phe Ser Pro Leu
 65 70 75 80
 Val Gln Tyr Gly Cys His Ser His Leu Arg Phe Phe Leu Cys Ser Leu
 85 90 95
 Tyr Ala Pro Met Cys Thr Asp Gln Val Ser Thr Pro Ile Pro Ala Cys
 100 105 110
 Arg Pro Met Cys Glu Gln Ala Arg Leu Arg Cys Ala Pro Ile Met Glu
 115 120 125
 Gln Phe Asn Phe Gly Trp Pro Asp Ser Leu Asp Cys Ala Arg Leu Pro
 130 135 140
 Thr Arg Asn Asp Pro His Ala Leu Cys Met Glu Ala Pro Glu Asn Thr
 145 150 155 160
 Ala Gly Pro Thr Glu Pro His Lys Gly Leu Gly Met Leu Pro Val Ala
 165 170 175
 Pro Arg Pro Ala Arg Pro Pro Gly Asp Ser Ala Pro Gly Pro Gly Ser
 180 185 190
 Gly Gly Thr Cys Asp Asn Pro Glu Lys Phe Gln Tyr Val Glu Lys Ser
 195 200 205
 Arg Ser Cys Ala Pro Arg Cys Gly Pro Gly Val Glu Val Phe Trp Ser
 210 215 220
 Arg Arg Asp Lys Asp Phe Ala Leu Val Trp Met Ala Val Trp Ser Ala
 225 230 235 240
 Leu Cys Phe Phe Ser Thr Ala Phe Thr Val Phe Thr Phe Leu Leu Glu
 245 250 255

Pro	His	Arg	Phe	Gln	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Phe	Leu	Ser	Met
			260					265					270		
Cys	Tyr	Asn	Val	Tyr	Ser	Leu	Ala	Phe	Leu	Ile	Arg	Ala	Val	Ala	Gly
		275					280					285			
Ala	Gln	Ser	Val	Ala	Cys	Asp	Gln	Glu	Ala	Gly	Ala	Leu	Tyr	Val	Ile
		290				295					300				
Gln	Glu	Gly	Leu	Glu	Asn	Thr	Gly	Cys	Thr	Leu	Val	Phe	Leu	Leu	Leu
305					310					315					320
Tyr	Tyr	Phe	Gly	Met	Ala	Ser	Ser	Leu	Trp	Trp	Val	Val	Leu	Thr	Leu
				325					330					335	
Thr	Trp	Phe	Leu	Ala	Ala	Gly	Lys	Lys	Trp	Gly	His	Glu	Ala	Ile	Glu
			340					345					350		
Ala	His	Gly	Ser	Tyr	Phe	His	Met	Ala	Ala	Trp	Gly	Leu	Pro	Ala	Leu
		355					360					365			
Lys	Thr	Ile	Val	Val	Leu	Thr	Leu	Arg	Lys	Val	Ala	Gly	Asp	Glu	Leu
	370					375					380				
Thr	Gly	Leu	Cys	Tyr	Val	Ala	Ser	Met	Asp	Pro	Ala	Ala	Leu	Thr	Gly
385					390					395					400
Phe	Val	Leu	Val	Pro	Leu	Ser	Cys	Tyr	Leu	Val	Leu	Gly	Thr	Ser	Phe
				405					410					415	
Leu	Leu	Thr	Gly	Phe	Val	Ala	Leu	Phe	His	Ile	Arg	Lys	Ile	Met	Lys
			420					425					430		
Thr	Gly	Gly	Thr	Asn	Thr	Glu	Lys	Leu	Glu	Lys	Leu	Met	Val	Lys	Ile
		435					440					445			
Gly	Val	Phe	Ser	Ile	Leu	Tyr	Thr	Val	Pro	Ala	Thr	Cys	Val	Ile	Val
	450					455					460				
Cys	Tyr	Val	Tyr	Glu	Arg	Leu	Asn	Met	Asp	Phe	Trp	Arg	Leu	Arg	Ala
465					470					475					480
Thr	Glu	Gln	Pro	Cys	Thr	Ala	Ala	Thr	Val	Pro	Gly	Gly	Arg	Arg	Asp
				485					490					495	
Cys	Ser	Leu	Pro	Gly	Gly	Ser	Val	Pro	Thr	Val	Ala	Val	Phe	Met	Leu
			500					505					510		
Lys	Ile	Phe	Met	Ser	Leu	Val	Val	Gly	Ile	Thr	Ser	Gly	Val	Trp	Val
		515					520					525			
Trp	Ser	Ser	Lys	Thr	Phe	Gln	Thr	Trp	Gln	Ser	Leu	Cys	Tyr	Arg	Lys
	530					535					540				
Met	Ala	Ala	Gly	Arg	Ala	Arg	Ala	Lys	Ala	Cys	Arg	Thr	Pro	Gly	Gly
545					550					555					560
Tyr	Gly	Arg	Gly	Thr	His	Cys	His	Tyr	Lys	Ala	Pro	Thr	Val	Val	Leu
				565					570					575	
His	Met	Thr	Lys	Thr	Asp	Pro	Ser	Leu	Glu	Asn	Pro	Thr	His	Leu	
			580					585					590		

<210> 60

<211> 581

<212> PRT

<213> Homo sapiens

<400> 60

Met	Gln	Arg	Pro	Gly	Pro	Arg	Leu	Trp	Leu	Val	Leu	Gln	Val	Met	Gly
1				5				10						15	
Ser	Cys	Ala	Ala	Ile	Ser	Ser	Met	Asp	Met	Glu	Arg	Pro	Gly	Asp	Gly
			20					25					30		
Lys	Cys	Gln	Pro	Ile	Glu	Ile	Pro	Met	Cys	Lys	Asp	Ile	Gly	Tyr	Asn
		35					40					45			
Met	Thr	Arg	Met	Pro	Asn	Leu	Met	Gly	His	Glu	Asn	Gln	Arg	Glu	Ala
50						55						60			

Ala	Ile	Gln	Leu	His	Glu	Phe	Ala	Pro	Leu	Val	Glu	Tyr	Gly	Cys	His
65					70					75					80
Gly	His	Leu	Arg	Phe	Phe	Leu	Cys	Ser	Leu	Tyr	Ala	Pro	Met	Cys	Thr
				85					90					95	
Glu	Gln	Val	Ser	Thr	Pro	Ile	Pro	Ala	Cys	Arg	Val	Met	Cys	Glu	Gln
			100					105					110		
Ala	Arg	Leu	Lys	Cys	Ser	Pro	Ile	Met	Glu	Gln	Phe	Asn	Phe	Lys	Trp
		115					120					125			
Pro	Asp	Ser	Leu	Asp	Cys	Arg	Lys	Leu	Pro	Asn	Lys	Asn	Asp	Pro	Asn
	130					135					140				
Tyr	Leu	Cys	Met	Glu	Ala	Pro	Asn	Asn	Gly	Ser	Asp	Glu	Pro	Thr	Arg
145					150					155					160
Gly	Ser	Gly	Leu	Phe	Pro	Pro	Leu	Phe	Arg	Pro	Gln	Arg	Pro	His	Ser
				165					170					175	
Ala	Gln	Glu	His	Pro	Leu	Lys	Asp	Gly	Gly	Pro	Gly	Arg	Gly	Gly	Cys
			180					185					190		
Asp	Asn	Pro	Gly	Lys	Phe	His	His	Val	Glu	Lys	Ser	Ala	Ser	Cys	Ala
	195						200					205			
Pro	Leu	Cys	Thr	Pro	Gly	Val	Asp	Val	Tyr	Trp	Ser	Arg	Glu	Asp	Lys
	210					215					220				
Arg	Phe	Ala	Val	Val	Trp	Leu	Ala	Ile	Trp	Ala	Val	Leu	Cys	Phe	Phe
225					230					235					240
Ser	Ser	Ala	Phe	Thr	Val	Leu	Thr	Phe	Leu	Ile	Asp	Pro	Ala	Arg	Phe
				245					250					255	
Arg	Tyr	Pro	Glu	Arg	Pro	Ile	Ile	Phe	Leu	Ser	Met	Cys	Tyr	Cys	Val
			260					265					270		
Tyr	Ser	Val	Gly	Tyr	Leu	Ile	Arg	Leu	Phe	Ala	Gly	Ala	Glu	Ser	Ile
	275						280					285			
Ala	Cys	Asp	Arg	Asp	Ser	Gly	Gln	Leu	Tyr	Val	Ile	Gln	Glu	Gly	Leu
	290					295					300				
Glu	Ser	Thr	Gly	Cys	Thr	Leu	Val	Phe	Leu	Val	Leu	Tyr	Tyr	Phe	Gly
305					310					315					320
Met	Ala	Ser	Ser	Leu	Trp	Trp	Val	Val	Leu	Thr	Leu	Thr	Trp	Phe	Leu
				325					330					335	
Ala	Ala	Gly	Lys	Lys	Trp	Gly	His	Glu	Ala	Ile	Glu	Ala	Asn	Ser	Ser
			340					345					350		
Tyr	Phe	His	Leu	Ala	Ala	Trp	Ala	Ile	Pro	Ala	Val	Lys	Thr	Ile	Leu
	355						360					365			
Ile	Leu	Val	Met	Arg	Arg	Val	Ala	Gly	Asp	Glu	Leu	Thr	Gly	Val	Cys
	370					375				380					
Tyr	Val	Gly	Ser	Met	Asp	Val	Asn	Ala	Leu	Thr	Gly	Phe	Val	Leu	Ile
385					390					395					400
Pro	Leu	Ala	Cys	Tyr	Leu	Val	Ile	Gly	Thr	Ser	Phe	Ile	Leu	Ser	Gly
				405					410					415	
Phe	Val	Ala	Leu	Phe	His	Ile	Arg	Arg	Val	Met	Lys	Thr	Gly	Gly	Glu
			420					425					430		
Asn	Thr	Asp	Lys	Leu	Glu	Lys	Leu	Met	Val	Arg	Ile	Gly	Leu	Phe	Ser
	435						440					445			
Val	Leu	Tyr	Thr	Val	Pro	Ala	Thr	Cys	Val	Ile	Ala	Cys	Tyr	Phe	Xaa
	450					455					460				
Glu	His	Leu	Asn	Met	Asp	Tyr	Trp	Lys	Ile	Leu	Ala	Ala	Gln	His	Lys
465					470					475					480
Cys	Lys	Met	Asn	Asn	Gln	Thr	Lys	Thr	Leu	Asp	Cys	Leu	Met	Ala	Ala
				485					490					495	
Ser	Ile	Pro	Ala	Val	Glu	Ile	Phe	Met	Val	Lys	Ile	Phe	Met	Leu	Leu
			500					505					510		
Val	Val	Gly	Ile	Thr	Ser	Gly	Met	Trp	Ile	Trp	Thr	Ser	Lys	Thr	Leu

515	520	525
Gln Ser Trp Gln Gln Val Cys Ser Arg Arg Leu Lys Lys Lys Ser Arg		
530	535	540
Arg Lys Pro Ala Ser Val Ile Thr Ser Gly Gly Ile Tyr Lys Lys Ala		
545	550	555
Gln His Pro Gln Lys Thr His His Gly Lys Tyr Glu Ile Pro Ala Gln		
565	570	575
Ser Pro Thr Cys Val		
580		

<210> 61
 <211> 319
 <212> PRT
 <213> Homo sapiens

<400> 61

Met Ala Glu Glu Glu Ala Pro Lys Lys Ser Arg Ala Ala Gly Gly Gly		
1	5	10
Ala Ser Trp Glu Leu Cys Ala Gly Ala Leu Ser Ala Arg Leu Ala Glu		
20	25	30
Glu Gly Ser Gly Asp Ala Gly Gly Arg Arg Arg Pro Pro Val Asp Pro		
35	40	45
Arg Arg Leu Ala Arg Gln Leu Leu Leu Leu Leu Trp Leu Leu Glu Ala		
50	55	60
Pro Leu Leu Leu Gly Val Arg Ala Gln Ala Ala Gly Gln Gly Pro Gly		
65	70	75
Gln Gly Pro Gly Pro Gly Gln Gln Pro Pro Pro Pro Gln Gln Gln		
85	90	95
Gln Ser Gly Gln Gln Tyr Asn Gly Glu Arg Gly Ile Ser Val Pro Asp		
100	105	110
His Gly Tyr Cys Gln Pro Ile Ser Ile Pro Leu Cys Thr Asp Ile Ala		
115	120	125
Tyr Asn Gln Thr Ile Met Pro Asn Leu Leu Gly His Thr Asn Gln Glu		
130	135	140
Asp Ala Gly Leu Glu Val His Gln Phe Tyr Pro Leu Val Lys Val Gln		
145	150	155
Cys Ser Ala Glu Leu Lys Phe Phe Leu Cys Ser Met Tyr Ala Pro Val		
165	170	175
Cys Thr Val Leu Glu Gln Ala Leu Pro Pro Cys Arg Ser Leu Cys Glu		
180	185	190
Arg Ala Arg Gln Gly Cys Glu Ala Leu Met Asn Lys Phe Gly Phe Gln		
195	200	205
Trp Pro Asp Thr Leu Lys Cys Glu Lys Phe Pro Val His Gly Ala Gly		
210	215	220
Glu Leu Cys Val Gly Gln Asn Thr Ser Asp Lys Gly Thr Pro Thr Pro		
225	230	235
Ser Leu Leu Pro Glu Phe Trp Thr Ser Asn Pro Gln His Gly Gly Gly		
245	250	255
Gly His Arg Gly Gly Phe Pro Gly Gly Ala Gly Ala Ser Glu Arg Gly		
260	265	270
Lys Phe Ser Cys Pro Arg Ala Leu Lys Val Pro Ser Tyr Leu Asn Tyr		
275	280	285
His Phe Leu Gly Glu Lys Asp Cys Gly Ala Pro Cys Glu Pro Thr Lys		
290	295	300
Val Tyr Gly Leu Met Tyr Phe Gly Pro Glu Glu Leu Arg Phe Ser		
305	310	315

<210> 62
 <211> 314
 <212> PRT
 <213> Mouse

<400> 62

Met	Ala	Glu	Glu	Ala	Ala	Pro	Ser	Glu	Ser	Arg	Ala	Ala	Gly	Arg	Leu
1				5					10					15	
Ser	Leu	Glu	Leu	Cys	Ala	Glu	Ala	Leu	Pro	Gly	Arg	Arg	Glu	Glu	Val
			20					25					30		
Gly	His	Glu	Asp	Thr	Ala	Ser	His	Arg	Arg	Pro	Arg	Ala	Asp	Pro	Arg
		35					40					45			
Arg	Trp	Ala	Ser	Gly	Leu	Leu	Leu	Leu	Trp	Leu	Leu	Glu	Ala	Pro	
	50					55				60					
Leu	Leu	Leu	Gly	Val	Arg	Ala	Gln	Ala	Ala	Gly	Gln	Val	Ser	Gly	Pro
65					70					75					80
Gly	Gln	Gln	Ala	Pro	Pro	Pro	Pro	Gln	Pro	Gln	Gln	Ser	Gly	Gln	Gln
				85					90					95	
Tyr	Asn	Gly	Glu	Arg	Gly	Ile	Ser	Ile	Pro	Asp	His	Gly	Tyr	Cys	Gln
		100						105					110		
Pro	Ile	Ser	Ile	Pro	Leu	Cys	Thr	Asp	Met	Ala	Tyr	Asn	Gln	Thr	Ile
		115					120					125			
Met	Pro	Asn	Leu	Leu	Gly	His	Thr	Asn	Gln	Glu	Asp	Ala	Gly	Leu	Glu
	130					135					140				
Val	His	Gln	Phe	Tyr	Pro	Leu	Val	Lys	Val	Gln	Cys	Ser	Ala	Glu	Leu
145					150					155				160	
Lys	Phe	Phe	Leu	Cys	Ser	Met	Tyr	Ala	Pro	Val	Cys	Thr	Val	Leu	Glu
			165						170					175	
Gln	Ala	Leu	Pro	Cys	Arg	Ser	Leu	Cys	Glu	Arg	Ala	Arg	Gln	Gly	
		180					185					190			
Cys	Glu	Ala	Leu	Met	Asn	Lys	Phe	Gly	Phe	Gln	Trp	Pro	Asp	Thr	Leu
		195				200					205				
Lys	Cys	Glu	Lys	Phe	Pro	Val	His	Gly	Ala	Gly	Glu	Leu	Cys	Val	Gly
	210					215					220				
Gln	Asn	Thr	Ser	Asp	Lys	Gly	Thr	Pro	Thr	Pro	Ser	Leu	Leu	Pro	Glu
225					230					235				240	
Phe	Trp	Thr	Ser	Asn	Gly	Gln	His	Gly	Gly	Gly	Gly	Tyr	Arg	Gly	Gly
			245						250					255	
Tyr	Pro	Gly	Gly	Ala	Gly	Thr	Val	Glu	Arg	Gly	Lys	Phe	Ser	Cys	Pro
		260						265					270		
Arg	Ala	Leu	Arg	Val	Pro	Ser	Tyr	Leu	Asn	Tyr	His	Phe	Leu	Gly	Glu
		275					280					285			
Lys	Asp	Cys	Gly	Ala	Pro	Cys	Glu	Pro	Thr	Lys	Val	Tyr	Gly	Leu	Met
	290					295					300				
Tyr	Phe	Gly	Pro	Glu	Glu	Leu	Arg	Phe	Ser						
305					310										

<210> 63
 <211> 244
 <212> PRT
 <213> Homo sapiens

<400> 63

Met	Arg	Pro	Arg	Ser	Ala	Leu	Pro	Arg	Leu	Leu	Leu	Pro	Leu	Leu	Leu
1				5					10					15	
Leu	Pro	Ala	Ala	Gly	Pro	Ala	Gln	Phe	His	Gly	Glu	Lys	Gly	Ile	Ser
			20					25						30	

Ile Pro Asp His Gly Phe Cys Gln Pro Ile Ser Ile Pro Leu Cys Thr
 35 40 45
 Asp Ile Ala Tyr Asn Gln Thr Ile Met Pro Asn Leu Leu Gly His Thr
 50 55 60
 Asn Gln Glu Asp Ala Gly Leu Glu Val His Gln Phe Tyr Pro Leu Val
 65 70 75 80
 Lys Val Gln Cys Ser Pro Glu Leu Arg Phe Phe Leu Cys Ser Met Tyr
 85 90 95
 Ala Pro Val Cys Thr Val Leu Glu Gln Ala Ile Pro Pro Cys Arg Ser
 100 105 110
 Ile Cys Glu Arg Ala Arg Gln Gly Cys Glu Ala Leu Met Asn Lys Phe
 115 120 125
 Gly Phe Gln Trp Pro Glu Arg Leu Arg Cys Glu His Phe Pro Arg His
 130 135 140
 Gly Ala Glu Gln Ile Cys Val Gly Gln Asn His Ser Glu Asp Gly Ala
 145 150 155 160
 Pro Ala Leu Leu Thr Thr Ala Pro Pro Pro Gly Leu Gln Pro Gly Ala
 165 170 175
 Gly Gly Thr Pro Gly Gly Pro Gly Gly Gly Ala Pro Pro Arg Tyr
 180 185 190
 Ala Thr Leu Glu His Pro Phe His Cys Pro Arg Val Leu Lys Val Pro
 195 200 205
 Ser Tyr Leu Ser Tyr Lys Phe Leu Gly Glu Arg Asp Cys Ala Ala Pro
 210 215 220
 Cys Glu Pro Ala Arg Pro Asp Gly Ser Met Phe Phe Ser Gln Glu Glu
 225 230 235 240
 Thr Arg Phe Ala

<210> 64

<211> 202

<212> PRT

<213> Homo sapiens

<400> 64

Met Ala Met Thr Trp Ile Val Phe Ser Leu Trp Pro Leu Thr Val Phe
 1 5 10 15
 Met Gly His Ile Gly Gly His Ser Leu Phe Ser Cys Glu Pro Ile Thr
 20 25 30
 Leu Arg Met Cys Gln Asp Leu Pro Tyr Asn Thr Thr Phe Met Pro Asn
 35 40 45
 Leu Leu Asn His Tyr Asp Gln Thr Ala Ala Leu Ala Met Glu Pro
 50 55 60
 Phe His Pro Met Val Asn Leu Asp Cys Ser Arg Asp Phe Arg Pro Phe
 65 70 75 80
 Leu Cys Ala Leu Tyr Ala Pro Ile Cys Met Glu Tyr Gly Arg Val Thr
 85 90 95
 Leu Pro Cys Arg Arg Leu Cys Gln Arg Ala Tyr Ser Glu Cys Ser Lys
 100 105 110
 Leu Met Glu Met Phe Gly Val Pro Trp Pro Glu Asp Met Glu Cys Ser
 115 120 125
 Arg Phe Pro Asp Cys Asp Glu Pro Tyr Pro Arg Leu Val Asp Leu Asn
 130 135 140
 Leu Ala Gly Glu Pro Thr Glu Gly Ala Pro Val Ala Val Gln Arg Asp
 145 150 155 160
 Tyr Gly Phe Trp Cys Pro Arg Glu Leu Lys Ile Asp Pro Asp Leu Gly
 165 170 175

Tyr Ser Phe Leu His Val Arg Asp Cys Ser Pro Pro Cys Pro Asn Met
180 185 190
Tyr Phe Arg Arg Glu Glu Leu Ser Phe Ala
195 200

<210> 65
<211> 202
<212> PRT
<213> Mouse

<400> 65
Met Ala Val Ser Trp Ile Val Phe Asp Leu Trp Leu Leu Thr Val Phe
1 5 10 15
Leu Gly Gln Ile Gly Gly His Ser Leu Phe Ser Cys Glu Pro Ile Thr
20 25 30
Leu Arg Met Cys Gln Asp Leu Pro Tyr Asn Thr Thr Phe Met Pro Asn
35 40 45
Leu Leu Asn His Tyr Asp Gln Gln Thr Ala Ala Leu Ala Met Glu Pro
50 55 60
Phe His Pro Met Val Asn Leu Asp Cys Ser Arg Asp Phe Arg Pro Phe
65 70 75 80
Leu Cys Ala Leu Tyr Ala Pro Ile Cys Met Glu Tyr Gly Arg Val Thr
85 90 95
Leu Pro Cys Arg Arg Leu Cys Gln Arg Ala Tyr Ser Glu Cys Ser Lys
100 105 110
Leu Met Glu Met Phe Gly Val Pro Trp Pro Glu Asp Met Glu Cys Ser
115 120 125
Arg Phe Pro Asp Cys Asp Glu Pro Tyr Pro Arg Leu Val Asp Leu Asn
130 135 140
Leu Val Gly Asp Pro Thr Glu Gly Ala Pro Val Ala Val Gln Arg Asp
145 150 155 160
Tyr Gly Phe Trp Cys Pro Arg Glu Leu Lys Ile Asp Pro Asp Leu Gly
165 170 175
Tyr Ser Phe Leu His Val Arg Asp Cys Ser Pro Pro Cys Pro Asn Met
180 185 190
Tyr Phe Arg Arg Glu Glu Leu Ser Phe Ala
195 200

<210> 66
<211> 219
<212> PRT
<213> Homo sapiens

<400> 66
Met Ala Trp Arg Gly Ala Gly Pro Ser Val Pro Gly Ala Pro Gly Gly
1 5 10 15
Val Gly Leu Ser Leu Gly Leu Leu Leu Gln Leu Leu Leu Leu Gly
20 25 30
Pro Ala Arg Gly Phe Gly Asp Glu Glu Glu Arg Arg Cys Asp Pro Ile
35 40 45
Arg Ile Ser Met Cys Gln Asn Leu Gly Tyr Asn Val Thr Lys Met Pro
50 55 60
Asn Leu Val Gly His Glu Leu Gln Thr Asp Ala Glu Leu Gln Leu Thr
65 70 75 80
Thr Phe Thr Pro Leu Ile Gln Tyr Gly Cys Ser Ser Gln Leu Gln Phe
85 90 95
Phe Leu Cys Ser Val Tyr Val Pro Met Cys Thr Glu Lys Ile Asn Ile

Met	Ala	Arg	Pro	Asp	Pro	Ser	Ala	Pro	Pro	Ser	Leu	Leu	Leu	Leu	Leu
1				5					10					15	
Leu	Ala	Gln	Leu	Val	Gly	Arg	Ala	Ala	Ala	Ala	Ser	Lys	Ala	Pro	Val
			20					25					30		
Cys	Gln	Glu	Ile	Thr	Val	Pro	Met	Cys	Arg	Gly	Ile	Gly	Tyr	Asn	Leu
		35					40					45			
Thr	His	Met	Pro	Asn	Gln	Phe	Asn	His	Asp	Thr	Gln	Asp	Glu	Ala	Gly
	50					55					60				
Leu	Glu	Val	His	Gln	Phe	Trp	Pro	Leu	Val	Glu	Ile	Gln	Cys	Ser	Pro
65				70						75					80
Asp	Leu	Arg	Phe	Phe	Leu	Cys	Thr	Met	Tyr	Thr	Pro	Ile	Cys	Leu	Pro
			85						90					95	
Asp	Tyr	His	Lys	Pro	Leu	Pro	Pro	Cys	Arg	Ser	Val	Cys	Glu	Arg	Ala
			100					105					110		
Lys	Ala	Gly	Cys	Ser	Pro	Leu	Met	Arg	Gln	Tyr	Gly	Phe	Ala	Trp	Pro
		115					120					125			
Glu	Arg	Met	Ser	Cys	Asp	Arg	Leu	Pro	Val	Leu	Gly	Arg	Asp	Ala	Glu
	130					135					140				
Val	Leu	Cys	Met	Asp	Tyr	Asn	Arg	Ser	Glu	Ala	Thr	Thr	Ala	Pro	Pro
145				150						155					160
Arg	Pro	Phe	Pro	Ala	Lys	Pro	Thr	Leu	Pro	Gly	Pro	Pro	Gly	Ala	Pro
			165						170					175	
Ala	Ser	Gly	Gly	Glu	Cys	Pro	Ala	Gly	Gly	Pro	Phe	Val	Cys	Lys	Cys
		180						185					190		
Arg	Glu	Pro	Phe	Val	Pro	Ile	Leu	Lys	Glu	Ser	His	Pro	Leu	Tyr	Asn
	195					200						205			
Lys	Val	Arg	Thr	Gly	Gln	Val	Pro	Asn	Cys	Ala	Val	Pro	Cys	Tyr	Gln
	210				215						220				
Pro	Ser	Phe	Ser	Ala	Asp	Glu	Arg	Thr	Phe	Ala					
225					230					235					

<210> 69

<211> 198

<212> PRT

<213> Homo sapiens

<400> 69

Met	Glu	Met	Phe	Thr	Phe	Leu	Leu	Thr	Cys	Ile	Phe	Leu	Pro	Leu	Leu
1				5					10					15	
Arg	Gly	His	Ser	Leu	Phe	Thr	Cys	Glu	Pro	Ile	Thr	Val	Pro	Arg	Cys
			20					25					30		
Met	Lys	Met	Ala	Tyr	Asn	Met	Thr	Phe	Phe	Pro	Asn	Leu	Met	Gly	His
	35						40					45			
Tyr	Asp	Gln	Ser	Ile	Ala	Ala	Val	Glu	Met	Glu	His	Phe	Leu	Pro	Leu
	50					55					60				
Ala	Asn	Leu	Glu	Cys	Ser	Pro	Asn	Ile	Glu	Thr	Phe	Leu	Cys	Lys	Ala
65				70						75					80
Phe	Val	Pro	Thr	Cys	Ile	Glu	Gln	Ile	His	Val	Val	Pro	Pro	Cys	Arg
			85						90					95	
Lys	Leu	Cys	Glu	Lys	Val	Tyr	Ser	Asp	Cys	Lys	Lys	Leu	Ile	Asp	Thr
			100					105					110		
Phe	Gly	Ile	Arg	Trp	Pro	Glu	Glu	Leu	Glu	Cys	Asp	Arg	Leu	Gln	Tyr
	115					120						125			
Cys	Asp	Glu	Thr	Val	Pro	Val	Thr	Phe	Asp	Pro	His	Thr	Glu	Phe	Leu
	130					135					140				
Gly	Pro	Gln	Lys	Lys	Thr	Glu	Gln	Val	Gln	Arg	Asp	Ile	Gly	Phe	Trp
145					150					155					160

Cys Pro Arg His Leu Lys Thr Ser Gly Gly Gln Gly Tyr Lys Phe Leu
 165 170 175
 Gly Ile Asp Gln Cys Ala Pro Pro Cys Pro Asn Met Tyr Phe Lys Ser
 180 185 190
 Asp Glu Leu Glu Phe Ala
 195

<210> 70
 <211> 198
 <212> PRT
 <213> Mouse

<400> 70
 Met Glu Arg Ser Pro Phe Leu Leu Ala Cys Ile Leu Leu Pro Leu Val
 1 5 10 15
 Arg Gly His Ser Leu Phe Thr Cys Glu Pro Ile Thr Val Pro Arg Cys
 20 25 30
 Met Lys Met Thr Tyr Asn Met Thr Phe Phe Pro Asn Leu Met Gly His
 35 40 45
 Tyr Asp Gln Gly Ile Ala Ala Val Glu Met Gly His Phe Leu His Leu
 50 55 60
 Ala Asn Leu Glu Cys Ser Pro Asn Ile Glu Met Phe Leu Cys Gln Ala
 65 70 75 80
 Phe Ile Pro Thr Cys Thr Glu Gln Ile His Val Val Leu Pro Cys Arg
 85 90 95
 Lys Leu Cys Glu Lys Ile Val Ser Asp Cys Lys Lys Leu Met Asp Thr
 100 105 110
 Phe Gly Ile Arg Trp Pro Glu Glu Leu Glu Cys Asn Arg Leu Pro His
 115 120 125
 Cys Asp Asp Thr Val Pro Val Thr Ser His Pro His Thr Glu Leu Ser
 130 135 140
 Gly Pro Gln Lys Lys Ser Asp Gln Val Pro Arg Asp Ile Gly Phe Trp
 145 150 155 160
 Cys Pro Lys His Leu Arg Thr Ser Gly Asp Gln Gly Tyr Arg Phe Leu
 165 170 175
 Gly Ile Glu Gln Cys Ala Pro Pro Cys Pro Asn Met Tyr Phe Lys Ser
 180 185 190
 Asp Glu Leu Asp Phe Ala
 195

<210> 71
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 71
 Met Arg Asp Pro Gly Ala Ala Ala Pro Leu Ser Ser Leu Gly Leu Cys
 1 5 10 15
 Ala Leu Val Leu Ala Leu Leu Gly Ala Leu Ser Ala Gly Ala Gly Ala
 20 25 30
 Gln Pro Tyr His Gly Glu Lys Gly Ile Ser Val Pro Asp His Gly Phe
 35 40 45
 Cys Gln Pro Ile Ser Ile Pro Leu Cys Thr Asp Ile Ala Tyr Asn Gln
 50 55 60
 Thr Ile Leu Pro Asn Leu Leu Gly His Thr Asn Gln Glu Asp Ala Gly
 65 70 75 80
 Leu Glu Val His Gln Phe Tyr Pro Leu Val Lys Val Gln Cys Ser Pro

				85					90					95			
Glu	Leu	Arg	Phe	Phe	Leu	Cys	Ser	Met	Tyr	Ala	Pro	Val	Cys	Thr	Val		
			100					105					110				
Leu	Asp	Gln	Ala	Ile	Pro	Pro	Cys	Arg	Ser	Leu	Cys	Glu	Arg	Ala	Arg		
		115					120					125					
Gln	Gly	Cys	Glu	Ala	Leu	Met	Asn	Lys	Phe	Gly	Phe	Gln	Trp	Pro	Glu		
	130					135					140						
Arg	Leu	Arg	Cys	Glu	Asn	Phe	Pro	Val	His	Gly	Ala	Gly	Glu	Ile	Cys		
145				150						155					160		
Val	Gly	Gln	Asn	Thr	Ser	Asp	Gly	Ser	Gly	Gly	Pro	Gly	Gly	Gly	Pro		
			165					170						175			
Thr	Ala	Tyr	Pro	Thr	Ala	Pro	Tyr	Leu	Pro	Asp	Leu	Pro	Phe	Thr	Ala		
		180					185						190				
Leu	Pro	Pro	Gly	Ala	Ser	Asp	Gly	Arg	Gly	Arg	Pro	Ala	Phe	Pro	Phe		
	195					200					205						
Ser	Cys	Pro	Arg	Gln	Leu	Lys	Val	Pro	Pro	Tyr	Leu	Gly	Tyr	Arg	Phe		
	210				215					220							
Leu	Gly	Glu	Arg	Asp	Cys	Gly	Ala	Pro	Cys	Glu	Pro	Gly	Arg	Ala	Asn		
225				230					235						240		
Gly	Leu	Met	Tyr	Phe	Lys	Glu	Glu	Glu	Arg	Arg	Phe	Ala					
				245				250									

<210> 72
 <211> 251
 <212> PRT
 <213> Mouse

<400> 72

Met	Arg	Gly	Pro	Gly	Thr	Ala	Ala	Ser	His	Ser	Pro	Leu	Gly	Leu	Cys		
1				5				10					15				
Ala	Leu	Val	Leu	Ala	Leu	Leu	Gly	Ala	Leu	Pro	Thr	Asp	Thr	Arg	Ala		
		20					25					30					
Gln	Pro	Tyr	His	Gly	Glu	Lys	Gly	Ile	Ser	Val	Pro	Asp	His	Gly	Phe		
	35					40					45						
Cys	Gln	Pro	Ile	Ser	Ile	Pro	Leu	Cys	Thr	Asp	Ile	Ala	Tyr	Asn	Gln		
	50				55					60							
Thr	Ile	Leu	Pro	Asn	Leu	Leu	Gly	His	Thr	Asn	Gln	Glu	Asp	Ala	Gly		
65				70					75					80			
Leu	Glu	Val	His	Gln	Phe	Tyr	Pro	Leu	Val	Lys	Val	Gln	Cys	Ser	Pro		
			85					90				95					
Glu	Leu	Arg	Phe	Phe	Leu	Cys	Ser	Met	Tyr	Ala	Pro	Val	Cys	Thr	Val		
		100					105					110					
Leu	Asp	Gln	Ala	Ile	Pro	Pro	Cys	Arg	Ser	Leu	Cys	Glu	Arg	Ala	Arg		
	115					120					125						
Gln	Gly	Cys	Glu	Ala	Leu	Met	Asn	Lys	Phe	Gly	Phe	Gln	Trp	Pro	Glu		
	130					135				140							
Arg	Leu	Arg	Cys	Glu	Asn	Phe	Pro	Val	His	Gly	Ala	Gly	Glu	Ile	Cys		
145				150					155						160		
Val	Gly	Gln	Asn	Thr	Ser	Asp	Gly	Ser	Gly	Gly	Ala	Gly	Gly	Ser	Pro		
			165					170						175			
Thr	Ala	Tyr	Pro	Thr	Ala	Pro	Tyr	Leu	Pro	Asp	Pro	Pro	Phe	Thr	Ala		
		180					185						190				
Met	Ser	Pro	Ser	Asp	Gly	Arg	Gly	Arg	Leu	Ser	Phe	Pro	Phe	Ser	Cys		
	195					200						205					
Pro	Arg	Gln	Leu	Lys	Val	Pro	Pro	Tyr	Leu	Gly	Tyr	Arg	Phe	Leu	Gly		
	210				215					220							
Glu	Arg	Asp	Cys	Gly	Ala	Pro	Cys	Glu	Pro	Gly	Arg	Ala	Asn	Gly	Leu		

225		230		235	240
Met Tyr Phe Lys Glu	Glu Glu Arg Arg	Phe Ala			
	245	250			

<210> 73
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 73
 Met Glu Trp Gly Tyr Leu Leu Glu Val Thr Ser Leu Leu Ala Ala Leu
 1 5 10 15
 Ala Leu Leu Gln Arg Ser Ser Gly Ala Ala Ala Ser Ala Lys Glu
 20 25 30
 Leu Ala Cys Gln Glu Ile Thr Val Pro Leu Cys Lys Gly Ile Gly Tyr
 35 40 45
 Asn Tyr Thr Tyr Met Pro Asn Gln Phe Asn His Asp Thr Gln Asp Glu
 50 55 60
 Ala Gly Leu Glu Val His Gln Phe Trp Pro Leu Val Glu Ile Gln Cys
 65 70 75 80
 Ser Pro Asp Leu Lys Phe Phe Leu Cys Ser Met Tyr Thr Pro Ile Cys
 85 90 95
 Leu Glu Asp Tyr Lys Lys Pro Leu Pro Pro Cys Arg Ser Val Cys Glu
 100 105 110
 Arg Ala Lys Ala Gly Cys Ala Pro Leu Met Arg Gln Tyr Gly Phe Ala
 115 120 125
 Trp Pro Asp Arg Met Arg Cys Asp Arg Leu Pro Glu Gln Gly Asn Pro
 130 135 140
 Asp Thr Leu Cys Met Asp Tyr Asn Arg Thr Asp Leu Thr Thr Ala Ala
 145 150 155 160
 Pro Ser Pro Pro Arg Arg Leu Pro Pro Pro Pro Gly Glu Gln Pro
 165 170 175
 Pro Ser Gly Ser Gly His Gly Arg Pro Pro Gly Ala Arg Pro Pro His
 180 185 190
 Arg Gly Gly Gly Arg Gly Gly Gly Gly Gly Asp Ala Ala Ala Pro Pro
 195 200 205
 Ala Arg Gly Gly Gly Gly Gly Gly Lys Ala Arg Pro Pro Gly Gly Gly
 210 215 220
 Ala Ala Pro Cys Glu Pro Gly Cys Gln Cys Arg Ala Pro Met Val Ser
 225 230 235 240
 Val Ser Ser Glu Arg His Pro Leu Tyr Asn Arg Val Lys Thr Gly Gln
 245 250 255
 Ile Ala Asn Cys Ala Leu Pro Cys His Asn Pro Phe Phe Ser Gln Asp
 260 265 270
 Glu Arg Ala Phe Thr
 275

<210> 74
 <211> 274
 <212> PRT
 <213> Mouse

<400> 74
 Met Glu Trp Gly Tyr Leu Leu Glu Val Thr Ser Leu Leu Ala Ala Leu
 1 5 10 15
 Ala Val Leu Gln Arg Ser Ser Gly Ala Ala Ala Ala Ser Ala Lys Glu
 20 25 30

Leu Ala Cys Gln Glu Ile Thr Val Pro Leu Cys Lys Gly Ile Gly Tyr
 35 40 45
 Asn Tyr Thr Tyr Met Pro Asn Gln Phe Asn His Asp Thr Gln Asp Glu
 50 55 60
 Ala Gly Leu Glu Val His Gln Phe Trp Pro Leu Val Glu Ile Gln Cys
 65 70 75 80
 Ser Pro Asp Leu Lys Phe Phe Leu Cys Ser Met Tyr Thr Pro Ile Cys
 85 90 95
 Leu Glu Asp Tyr Lys Lys Pro Leu Pro Pro Cys Arg Ser Val Cys Glu
 100 105 110
 Arg Ala Lys Ala Gly Cys Ala Pro Leu Met Arg Gln Tyr Gly Phe Ala
 115 120 125
 Trp Pro Asp Arg Met Arg Cys Asp Arg Leu Pro Glu Gln Gly Asn Pro
 130 135 140
 Asp Thr Leu Cys Met Asp Tyr Asn Arg Thr Asp Leu Thr Thr Ala Ala
 145 150 155 160
 Pro Ser Pro Pro Arg Arg Leu Pro Pro Pro Pro Pro Pro Gly Glu Gln
 165 170 175
 Pro Pro Ser Gly Ser Gly His Ser Arg Pro Pro Gly Ala Arg Pro Pro
 180 185 190
 His Arg Gly Gly Ser Ser Arg Gly Ser Gly Asp Ala Ala Ala Ala Pro
 195 200 205
 Pro Ser Arg Gly Gly Lys Ala Arg Pro Pro Gly Gly Gly Ala Ala Pro
 210 215 220
 Cys Glu Pro Gly Cys Gln Cys Arg Ala Pro Met Val Ser Val Ser Ser
 225 230 235 240
 Glu Arg His Pro Leu Tyr Asn Arg Val Lys Thr Gly Gln Ile Ala Asn
 245 250 255
 Cys Ala Leu Pro Cys His Asn Pro Phe Ser Gln Asp Glu Arg Ala
 260 265 270
 Phe Thr

<210> 75
 <211> 231
 <212> PRT
 <213> Homo sapiens

<400> 75
 Met Ala Val Ala Pro Leu Arg Gly Ala Leu Leu Leu Trp Gln Leu Leu
 1 5 10 15
 Ala Ala Gly Gly Ala Ala Leu Glu Ile Gly Arg Phe Asp Pro Glu Arg
 20 25 30
 Gly Arg Gly Ala Ala Pro Cys Gln Ala Val Glu Ile Pro Met Cys Arg
 35 40 45
 Gly Ile Gly Tyr Asn Leu Thr Arg Met Pro Asn Leu Leu Gly His Thr
 50 55 60
 Ser Gln Gly Glu Ala Ala Glu Leu Ala Glu Phe Ala Pro Leu Val
 65 70 75 80
 Gln Tyr Gly Cys His Ser His Leu Arg Phe Phe Leu Cys Ser Leu Tyr
 85 90 95
 Ala Pro Met Cys Thr Asp Gln Val Ser Thr Pro Ile Pro Ala Cys Arg
 100 105 110
 Pro Met Cys Glu Gln Ala Arg Leu Arg Cys Ala Pro Ile Met Glu Gln
 115 120 125
 Phe Asn Phe Gly Trp Pro Asp Ser Leu Asp Cys Ala Arg Leu Pro Thr
 130 135 140

Arg Asn Asp Pro His Ala Leu Cys Met Glu Ala Pro Glu Asn Ala Thr
 145 150 155 160
 Ala Gly Pro Ala Glu Pro His Lys Gly Leu Gly Met Leu Pro Val Ala
 165 170 175
 Pro Arg Pro Ala Arg Pro Pro Gly Asp Leu Gly Pro Gly Ala Gly Gly
 180 185 190
 Ser Gly Thr Cys Glu Asn Pro Glu Lys Phe Gln Tyr Val Glu Lys Ser
 195 200 205
 Arg Ser Cys Ala Pro Arg Cys Gly Pro Gly Val Glu Val Phe Trp Ser
 210 215 220
 Arg Arg Asp Lys Asp Phe Ala
 225 230

<210> 76
 <211> 232
 <212> PRT
 <213> Mouse

<400> 76
 Met Ala Val Pro Pro Leu Leu Arg Gly Ala Leu Leu Leu Trp Gln Leu
 1 5 10 15
 Leu Ala Thr Gly Gly Ala Ala Leu Glu Ile Gly Arg Phe Asp Pro Glu
 20 25 30
 Arg Gly Arg Gly Pro Ala Pro Cys Gln Ala Met Glu Ile Pro Met Cys
 35 40 45
 Arg Gly Ile Gly Tyr Asn Leu Thr Arg Met Pro Asn Leu Leu Gly His
 50 55 60
 Thr Ser Gln Gly Glu Ala Ala Ala Gln Leu Ala Glu Phe Ser Pro Leu
 65 70 75 80
 Val Gln Tyr Gly Cys His Ser His Leu Arg Phe Phe Leu Cys Ser Leu
 85 90 95
 Tyr Ala Pro Met Cys Thr Asp Gln Val Ser Thr Pro Ile Pro Ala Cys
 100 105 110
 Arg Pro Met Cys Glu Gln Ala Arg Leu Arg Cys Ala Pro Ile Met Glu
 115 120 125
 Gln Phe Asn Phe Gly Trp Pro Asp Ser Leu Asp Cys Ala Arg Leu Pro
 130 135 140
 Thr Arg Asn Asp Pro His Ala Leu Cys Met Glu Ala Pro Glu Asn Ala
 145 150 155 160
 Thr Ala Gly Pro Thr Glu Pro His Lys Gly Leu Gly Met Leu Pro Val
 165 170 175
 Ala Pro Arg Pro Ala Arg Pro Pro Gly Asp Ser Ala Pro Gly Pro Gly
 180 185 190
 Ser Gly Gly Thr Cys Asp Asn Pro Glu Lys Phe Gln Tyr Val Glu Lys
 195 200 205
 Ser Arg Ser Cys Ala Pro Arg Cys Gly Pro Gly Val Glu Val Phe Trp
 210 215 220
 Ser Arg Arg Asp Lys Asp Phe Ala
 225 230

<210> 77
 <211> 227
 <212> PRT
 <213> Homo sapiens

<400> 77
 Met Gln Arg Pro Gly Pro Arg Leu Trp Leu Val Leu Gln Val Met Gly

1				5					10					15			
Ser	Cys	Ala	Ala	Ile	Ser	Ser	Met	Asp	Met	Glu	Arg	Pro	Gly	Asp	Gly		
			20					25					30				
Lys	Cys	Gln	Pro	Ile	Glu	Ile	Pro	Met	Cys	Lys	Asp	Ile	Gly	Tyr	Asn		
		35					40					45					
Met	Thr	Arg	Met	Pro	Asn	Leu	Met	Gly	His	Glu	Asn	Gln	Arg	Glu	Ala		
	50					55					60						
Ala	Ile	Gln	Leu	His	Glu	Phe	Ala	Pro	Leu	Val	Glu	Tyr	Gly	Cys	His		
65				70						75					80		
Gly	His	Leu	Arg	Phe	Leu	Cys	Ser	Leu	Tyr	Ala	Pro	Met	Cys	Thr			
			85					90				95					
Glu	Gln	Val	Ser	Thr	Pro	Ile	Pro	Ala	Cys	Arg	Val	Met	Cys	Glu	Gln		
		100						105				110					
Ala	Arg	Leu	Lys	Cys	Ser	Pro	Ile	Met	Glu	Gln	Phe	Asn	Phe	Lys	Trp		
	115					120					125						
Pro	Asp	Ser	Leu	Asp	Cys	Arg	Lys	Leu	Pro	Asn	Lys	Asn	Asp	Pro	Asn		
	130				135					140							
Tyr	Leu	Cys	Met	Glu	Ala	Pro	Asn	Asn	Gly	Ser	Asp	Glu	Pro	Thr	Arg		
145				150					155						160		
Gly	Ser	Gly	Leu	Phe	Pro	Pro	Leu	Phe	Arg	Pro	Gln	Arg	Pro	His	Ser		
			165					170						175			
Ala	Gln	Glu	His	Pro	Leu	Lys	Asp	Gly	Gly	Pro	Gly	Arg	Gly	Gly	Cys		
		180						185				190					
Asp	Asn	Pro	Gly	Lys	Phe	His	His	Val	Glu	Lys	Ser	Ala	Ser	Cys	Ala		
	195					200					205						
Pro	Leu	Cys	Thr	Pro	Gly	Val	Asp	Val	Tyr	Trp	Ser	Arg	Glu	Asp	Lys		
	210				215						220						
Arg	Phe	Ala															
225																	

<210> 78
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 78																	
Asp	Arg	Val	Val	Cys	Asn	Asp	Lys	Phe	Ala	Glu	Asp	Gly	Ala	Arg	Thr		
1			5					10					15				
Val	Ala	Gln	Gly	Thr	Lys	Lys	Glu	Gly	Cys	Thr	Ile	Leu					
		20						25									

<210> 79
 <211> 29
 <212> PRT
 <213> Mouse

<400> 79																	
Asp	Arg	Val	Val	Cys	Asn	Asp	Lys	Phe	Ala	Glu	Asp	Gly	Ala	Arg	Thr		
1			5					10					15				
Val	Ala	Gln	Gly	Thr	Asn	Lys	Glu	Gly	Cys	Thr	Ile	Leu					
		20						25									

<210> 80
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 80

Glu Arg Val Val Cys Asn Glu Arg Phe Ser Glu Asp Gly Tyr Arg Thr
1 5 10 15
Val Val Gln Gly Thr Lys Lys Glu Gly Cys Thr Ile Leu
20 25

<210> 81

<211> 30

<212> PRT

<213> Homo sapiens

<400> 81

Asp Arg Val Ala Cys Asn Ala Ser Ile Pro Ala Gln Tyr Lys Ala Ser
1 5 10 15
Thr Val Thr Gln Gly Ser His Asn Lys Ala Cys Thr Met Leu
20 25 30

<210> 82

<211> 30

<212> PRT

<213> Mouse

<400> 82

Asp Arg Val Ala Cys Asn Ala Ser Ser Pro Ala Gln Tyr Lys Ala Ser
1 5 10 15
Thr Val Thr Gln Gly Ser His Asn Lys Ala Cys Thr Met Leu
20 25 30

<210> 83

<211> 29

<212> PRT

<213> Homo sapiens

<400> 83

Arg Glu Arg Ile Ser Cys Asp Phe Glu Glu Ala Ala Glu Pro Val Leu
1 5 10 15
Ile Gln Glu Gly Leu Lys Asn Thr Gly Cys Ala Ile Ile
20 25

<210> 84

<211> 29

<212> PRT

<213> Mouse

<400> 84

Arg Glu Arg Ile Ser Cys Asp Phe Glu Glu Ala Ala Glu Pro Val Leu
1 5 10 15
Ile Gln Glu Gly Leu Lys Asn Thr Gly Cys Ala Ile Ile
20 25

<210> 85

<211> 26

<212> PRT

<213> Homo sapiens

<400> 85

His Ala Ser Val Ala Cys Ser Arg Glu His Asn His Ile His Tyr Glu

1 5 10 15
 Thr Thr Gly Pro Ala Leu Cys Thr Ile Val
 20 25

<210> 86
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 86
 Asp Ser Thr Ala Cys Asn Lys Ala Asp Glu Lys Leu Glu Leu Gly Asp
 1 5 10 15
 Thr Val Val Leu Gly Ser Gln Asn Lys Ala Cys Thr Val Leu
 20 25 30

<210> 87
 <211> 30
 <212> PRT
 <213> Mouse

<400> 87
 Asn Ser Thr Ala Cys Asn Lys Ala Asp Glu Lys Leu Glu Leu Gly Asp
 1 5 10 15
 Thr Val Val Leu Gly Ser Lys Asn Lys Ala Cys Ser Val Val
 20 25 30

<210> 88
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 88
 Asp Arg Ala Val Cys Val Glu Arg Phe Ser Asp Asp Gly Tyr Arg Thr
 1 5 10 15
 Val Ala Gln Gly Thr Lys Lys Glu Gly Cys Thr Ile Leu
 20 25

<210> 89
 <211> 29
 <212> PRT
 <213> Mouse

<400> 89
 Asp Arg Ala Val Cys Val Glu Arg Phe Ser Asp Asp Gly Tyr Arg Thr
 1 5 10 15
 Val Ala Gln Gly Thr Lys Lys Glu Gly Cys Thr Ile Leu
 20 25

<210> 90
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 90
 His Glu Lys Val Ala Cys Ser Gly Gly Ala Pro Gly Ala Gly Gly Ala
 1 5 10 15
 Gly Gly Ala Gly Gly Ala Ala Ala Gly Ala Gly Ala Ala Gly Ala Gly

20 25 30
 Ala Gly Gly Pro Gly Gly Arg Gly Glu Tyr Glu Glu Leu Gly Ala Val
 35 40 45
 Glu Gln His Val Arg Tyr Glu Thr Thr Gly Pro Ala Leu Cys Thr Val
 50 55 60
 Val
 65

<210> 91
 <211> 66
 <212> PRT
 <213> Mouse

<400> 91
 His Glu Lys Val Ala Cys Ser Gly Gly Ala Pro Gly Ala Gly Gly Arg
 1 5 10 15
 Gly Gly Ala Gly Gly Ala Ala Ala Gly Ala Gly Ala Ala Gly Arg
 20 25 30
 Gly Ala Ser Ser Pro Gly Ala Arg Gly Glu Tyr Glu Glu Leu Gly Ala
 35 40 45
 Val Glu Gln His Val Arg Tyr Glu Thr Thr Gly Pro Ala Leu Cys Thr
 50 55 60
 Val Val
 65

<210> 92
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 92
 Ala Gln Ser Val Ala Cys Asp Gln Glu Ala Gly Ala Leu Tyr Val Ile
 1 5 10 15
 Gln Glu Gly Leu Glu Asn Thr Gly Cys Thr Leu Val
 20 25

<210> 93
 <211> 28
 <212> PRT
 <213> Mouse

<400> 93
 Ala Gln Ser Val Ala Cys Asp Gln Glu Ala Gly Ala Leu Tyr Val Ile
 1 5 10 15
 Gln Glu Gly Leu Glu Asn Thr Gly Cys Thr Leu Val
 20 25

<210> 94
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 94
 Ala Glu Ser Ile Ala Cys Asp Arg Asp Ser Gly Gln Leu Tyr Val Ile
 1 5 10 15
 Gln Glu Gly Leu Glu Ser Thr Gly Cys Thr Leu Val
 20 25

<210> 95
<211> 25
<212> PRT
<213> Homo sapiens

<400> 95
Gly Gln Val Asp Gly Asp Val Leu Ser Gly Val Cys Phe Val Gly Leu
1 5 10 15
Asn Asn Val Asp Ala Leu Arg Gly Phe
20 25

<210> 96
<211> 25
<212> PRT
<213> Mouse

<400> 96
Gly Gln Val Asp Gly Asp Val Leu Ser Gly Val Cys Phe Leu Gly Leu
1 5 10 15
Asn Asn Val Asp Ala Leu Arg Gly Phe
20 25

<210> 97
<211> 25
<212> PRT
<213> Homo sapiens

<400> 97
Gly Gln Ile Asp Gly Asp Leu Leu Ser Gly Val Cys Phe Val Gly Leu
1 5 10 15
Asn Ser Leu Asp Pro Leu Arg Gly Phe
20 25

<210> 98
<211> 25
<212> PRT
<213> Homo sapiens

<400> 98
Asn Lys Ile Glu Gly Asp Asn Ile Ser Gly Val Cys Phe Val Gly Leu
1 5 10 15
Tyr Asp Val Asp Ala Leu Arg Tyr Phe
20 25

<210> 99
<211> 25
<212> PRT
<213> Mouse

<400> 99
Asn Lys Ile Glu Gly Asp Asn Ile Ser Gly Val Cys Phe Val Gly Leu
1 5 10 15
Tyr Asp Val Asp Ala Leu Arg Tyr Phe
20 25

<210> 100

<211> 25
<212> PRT
<213> Homo sapiens

<400> 100
Arg Leu Val Asp Ala Asp Glu Leu Thr Gly Leu Cys Tyr Val Gly Asn
1 5 10 15
Gln Asn Leu Asp Ala Leu Thr Gly Phe
20 25

<210> 101
<211> 25
<212> PRT
<213> Mouse

<400> 101
Arg Leu Val Asp Ala Asp Glu Leu Thr Gly Leu Cys Tyr Val Gly Asn
1 5 10 15
Gln Asn Leu Asp Ala Leu Thr Gly Phe
20 25

<210> 102
<211> 25
<212> PRT
<213> Homo sapiens

<400> 102
Ser Ser Val Asp Gly Asp Pro Val Ala Gly Ile Cys Tyr Val Gly Asn
1 5 10 15
Gln Asn Leu Asn Ser Leu Arg Arg Phe
20 25

<210> 103
<211> 25
<212> PRT
<213> Homo sapiens

<400> 103
Asn Lys Val Glu Gly Asp Asn Ile Ser Gly Val Cys Phe Val Gly Leu
1 5 10 15
Tyr Asp Leu Asp Ala Ser Arg Tyr Phe
20 25

<210> 104
<211> 25
<212> PRT
<213> Mouse

<400> 104
Asn Lys Val Glu Gly Asp Asn Ile Ser Gly Val Cys Phe Val Gly Leu
1 5 10 15
Tyr Asp Leu Asp Ala Ser Arg Tyr Phe
20 25

<210> 105
<211> 25
<212> PRT

<213> Homo sapiens

<400> 105

Gly	Gln	Val	Asp	Gly	Asp	Leu	Leu	Ser	Gly	Val	Cys	Tyr	Val	Gly	Leu
1				5					10					15	
Ser	Ser	Val	Asp	Ala	Leu	Arg	Gly	Phe							
			20					25							

<210> 106

<211> 25

<212> PRT

<213> Mouse

<400> 106

Gly	Gln	Val	Asp	Gly	Asp	Leu	Leu	Ser	Gly	Val	Cys	Tyr	Val	Gly	Leu
1				5					10					15	
Ser	Ser	Val	Asp	Ala	Leu	Arg	Gly	Phe							
			20					25							

<210> 107

<211> 25

<212> PRT

<213> Homo sapiens

<400> 107

Ser	Ser	Val	Asp	Gly	Asp	Pro	Val	Ala	Gly	Ile	Cys	Tyr	Val	Gly	Asn
1				5					10					15	
Gln	Ser	Leu	Asp	Asn	Leu	Arg	Gly	Phe							
			20					25							

<210> 108

<211> 25

<212> PRT

<213> Mouse

<400> 108

Ser	Ser	Val	Asp	Gly	Asp	Pro	Val	Ala	Gly	Ile	Cys	Tyr	Val	Gly	Asn
1				5					10					15	
Gln	Ser	Leu	Asp	Asn	Leu	Arg	Gly	Phe							
			20					25							

<210> 109

<211> 25

<212> PRT

<213> Homo sapiens

<400> 109

Arg	Lys	Val	Ala	Gly	Asp	Glu	Leu	Thr	Gly	Leu	Cys	Tyr	Val	Ala	Ser
1				5					10					15	
Thr	Asp	Ala	Ala	Ala	Leu	Thr	Gly	Phe							
			20					25							

<210> 110

<211> 25

<212> PRT

<213> Mouse

<400> 110
 Arg Lys Val Ala Gly Asp Glu Leu Thr Gly Leu Cys Tyr Val Ala Ser
 1 5 10 15
 Met Asp Pro Ala Ala Leu Thr Gly Phe
 20 25

<210> 111
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 111
 Arg Arg Val Ala Gly Asp Glu Leu Thr Gly Val Cys Tyr Val Gly Ser
 1 5 10 15
 Met Asp Val Asn Ala Leu Thr Gly
 20

<210> 112
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 112
 Ala Phe Arg Asp Gln Trp Glu Arg Ser Trp Val Ala Gln Ser Cys Lys
 1 5 10 15
 Ser Tyr Ala Ile Pro Cys Pro His Leu Gln Ala Gly Gly Gly Ala Pro
 20 25 30
 Pro His Pro Pro Met Ser Pro
 35

<210> 113
 <211> 39
 <212> PRT
 <213> Mouse

<400> 113
 Ala Phe Arg Asp Gln Trp Glu Arg Ser Trp Val Ala Gln Ser Cys Lys
 1 5 10 15
 Ser Tyr Ala Ile Pro Cys Pro His Leu Gln Gly Gly Gly Gly Val Pro
 20 25 30
 Pro His Pro Pro Met Ser Pro
 35

<210> 114
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 114
 Ala Phe Arg Glu His Trp Glu Arg Ser Trp Val Ser Gln His Cys Lys
 1 5 10 15
 Ser Leu Ala Ile Pro Cys Pro Ala His Tyr Thr Pro Arg Met Ser Pro
 20 25 30

<210> 115
 <211> 32
 <212> PRT

<213> Homo sapiens

<400> 115

Ala	Tyr	Arg	Gly	Ile	Trp	Glu	Thr	Thr	Trp	Ile	Gln	Glu	Arg	Cys	Arg
1				5					10					15	
Glu	Tyr	His	Ile	Pro	Cys	Pro	Tyr	Gln	Val	Thr	Gln	Met	Ser	Arg	Pro
			20					25					30		

<210> 116

<211> 32

<212> PRT

<213> Mouse

<400> 116

Ala	Tyr	Arg	Gly	Ile	Trp	Glu	Thr	Thr	Trp	Ile	Gln	Glu	Arg	Cys	Arg
1				5					10					15	
Glu	Tyr	His	Ile	Pro	Cys	Pro	Tyr	Gln	Val	Thr	Gln	Met	Ser	Arg	Pro
			20					25					30		

<210> 117

<211> 17

<212> PRT

<213> Homo sapiens

<400> 117

Ser	Asn	Trp	Ala	Leu	Phe	Arg	Tyr	Ser	Ala	Asp	Asp	Ser	Asn	Met	Ala
1				5					10					15	
Val															

<210> 118

<211> 17

<212> PRT

<213> Mouse

<400> 118

Ser	Asn	Trp	Ala	Leu	Phe	Arg	Tyr	Ser	Ala	Asp	Asp	Ser	Asn	Met	Ala
1				5					10					15	
Val															

<210> 119

<211> 26

<212> PRT

<213> Homo sapiens

<400> 119

His	Tyr	Arg	Glu	Ser	Trp	Glu	Ala	Ala	Leu	Thr	Cys	Ala	Cys	Pro	Gly
1				5					10					15	
His	Asp	Thr	Gly	Gln	Pro	Arg	Ala	Lys	Pro						
			20					25							

<210> 120

<211> 32

<212> PRT

<213> Homo sapiens

<400> 120

Val	Asn	Arg	Ile	Thr	Trp	Glu	Ile	Thr	Trp	Val	Ser	Asp	His	Cys	Arg
1				5					10					15	
Gln	Tyr	His	Ile	Pro	Cys	Pro	Tyr	Gln	Ala	Lys	Ala	Lys	Ala	Arg	Pro
			20					25						30	

<210> 121

<211> 32

<212> PRT

<213> Mouse

<400> 121

Val	Asn	Arg	Ile	Thr	Trp	Glu	Met	Thr	Trp	Phe	Ser	Asp	His	Cys	His
1				5					10					15	
Gln	Tyr	Arg	Ile	Pro	Cys	Pro	Tyr	Gln	Ala	Asn	Pro	Lys	Ala	Arg	Pro
			20					25						30	

<210> 122

<211> 32

<212> PRT

<213> Homo sapiens

<400> 122

Ala	Phe	Arg	Glu	His	Trp	Glu	Arg	Thr	Trp	Leu	Leu	Gln	Thr	Cys	Lys
1				5					10					15	
Ser	Tyr	Ala	Val	Pro	Cys	Pro	Pro	Gly	His	Phe	Pro	Pro	Met	Ser	Pro
			20					25						30	

<210> 123

<211> 32

<212> PRT

<213> Mouse

<400> 123

Ala	Phe	Arg	Glu	His	Trp	Glu	Arg	Thr	Trp	Leu	Leu	Gln	Thr	Cys	Lys
1				5					10					15	
Ser	Tyr	Ala	Val	Pro	Cys	Pro	Pro	Arg	His	Phe	Ser	Pro	Met	Ser	Pro
			20					25						30	

<210> 124

<211> 26

<212> PRT

<213> Homo sapiens

<400> 124

His	Asn	Arg	Pro	Arg	Trp	Glu	Ala	Thr	His	Asn	Cys	Pro	Cys	Leu	Arg
1				5					10					15	
Asp	Leu	Gln	Pro	Asp	Gln	Ala	Arg	Arg	Pro						
			20					25							

<210> 125

<211> 26

<212> PRT

<213> Mouse

<400> 125

His Asn Arg Pro Arg Trp Glu Ala Thr His Asn Cys Pro Cys Leu Arg

1 5 10 15
 Asp Leu Gln Pro Asp Gln Ala Arg Arg Pro
 20 25

<210> 126
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 126
 Leu Asn Met Asp Phe Trp Arg Leu Arg Ala Thr Glu Gln Pro Cys Ala
 1 5 10 15
 Ala Ala Ala Gly Pro Gly Gly Arg Arg Asp Cys Ser Leu Pro Gly Gly
 20 25 30
 Ser Val Pro
 35

<210> 127
 <211> 35
 <212> PRT
 <213> Mouse

<400> 127
 Leu Asn Met Asp Phe Trp Arg Leu Arg Ala Thr Glu Gln Pro Cys Thr
 1 5 10 15
 Ala Ala Thr Val Pro Gly Gly Arg Arg Asp Cys Ser Leu Pro Gly Gly
 20 25 30
 Ser Val Pro
 35

<210> 128
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 128
 Leu Asn Met Asp Tyr Trp Lys Ile Leu Ala Ala Gln His Lys Cys Lys
 1 5 10 15
 Met Asn Asn Gln Thr Lys Thr Leu Asp Cys Leu Met Ala Ala Ser Ile
 20 25 30
 Pro

<210> 129
 <211> 48
 <212> PRT
 <213> Human

<400> 129
 Val Gly Gln Asn Thr Ser Asp Lys Gly Thr Pro Ser Leu Leu Pro Glu
 1 5 10 15
 Phe Trp Thr Ser Asn Pro Gln His Gly Gly Gly His Arg Gly Gly Phe
 20 25 30
 Pro Gly Gly Ala Gly Ala Ser Glu Arg Gly Lys Phe Ser Cys Pro Arg
 35 40 45

<210> 130

<211> 51
<212> PRT
<213> Human

<400> 130
Val Gly Gln Asn His Ser Glu Asp Gly Ala Pro Ala Leu Leu Thr Thr
1 5 10 15
Ala Pro Pro Pro Gly Leu Gln Pro Gly Ala Gly Gly Thr Pro Gly Gly
20 25 30
Pro Gly Gly Gly Gly Ala Pro Pro Arg Tyr Ala Thr Leu Glu His Pro
35 40 45
Phe His Cys
50

<210> 131
<211> 26
<212> PRT
<213> Human

<400> 131
Leu Val Asp Leu Asn Leu Ala Gly Glu Pro Thr Glu Gly Ala Pro Val
1 5 10 15
Ala Val Gln Arg Asp Tyr Gly Phe Trp Cys
20 25

<210> 132
<211> 20
<212> PRT
<213> Human

<400> 132
Cys Met Glu Gly Pro Gly Asp Glu Glu Val Pro Leu Pro His Lys Thr
1 5 10 15
Pro Ile Gln Pro
20

<210> 133
<211> 46
<212> PRT
<213> Human

<400> 133
Cys Met Asp Tyr Asn Arg Ser Glu Ala Thr Thr Ala Pro Pro Arg Pro
1 5 10 15
Phe Pro Ala Lys Pro Thr Leu Pro Gly Pro Pro Gly Ala Pro Ala Ser
20 25 30
Gly Gly Glu Cys Pro Ala Gly Gly Pro Phe Val Cys Lys Cys
35 40 45

<210> 134
<211> 26
<212> PRT
<213> Human

<400> 134
Thr Phe Asp Pro His Thr Glu Phe Leu Gly Pro Gln Lys Lys Thr Glu
1 5 10 15

Gln Val Gln Arg Asp Ile Gly Phe Met Cys
 20 25

<210> 135
 <211> 50
 <212> PRT
 <213> Human

<400> 135
 Val Gly Gln Asn Thr Ser Asp Gly Ser Gly Gly Pro Gly Gly Gly Pro
 1 5 10 15
 Thr Ala Tyr Pro Thr Ala Pro Tyr Leu Pro Asp Leu Pro Phe Thr Ala
 20 25 30
 Leu Pro Pro Gly Ala Ser Asp Gly Arg Gly Arg Pro Ala Phe Pro Phe
 35 40 45
 Ser Cys
 50

<210> 136
 <211> 86
 <212> PRT
 <213> Human

<400> 136
 Cys Met Asp Tyr Asn Arg Thr Asp Leu Thr Thr Ala Ala Pro Ser Pro
 1 5 10 15
 Pro Arg Arg Leu Pro Pro Pro Pro Gly Glu Gln Pro Pro Ser Gly
 20 25 30
 Ser Gly His Gly Arg Pro Pro Gly Ala Arg Pro Pro His Arg Gly Gly
 35 40 45
 Gly Arg Gly Gly Gly Gly Asp Ala Ala Ala Pro Pro Ala Arg Gly Gly
 50 55 60
 Gly Gly Gly Gly Lys Ala Arg Pro Pro Gly Gly Gly Ala Ala Pro Cys
 65 70 75 80
 Glu Pro Gly Cys Gln Cys
 85

<210> 137
 <211> 37
 <212> PRT
 <213> Human

<400> 137
 Cys Met Glu Ala Pro Glu Asn Ala Thr Ala Gly Pro Ala Glu Pro His
 1 5 10 15
 Lys Gly Leu Gly Met Leu Pro Val Ala Pro Arg Pro Ala Arg Pro Pro
 20 25 30
 Gly Asp Leu Gly Pro
 35

<210> 138
 <211> 38
 <212> PRT
 <213> Human

<400> 138
 Asn Tyr Leu Cys Val Glu Ala Pro Asn Asn Gly Ser Asp Glu Pro Thr

1 5 10 15
 Arg Gly Ser Gly Leu Phe Pro Pro Leu Phe Arg Pro Gln Arg Pro His
 20 25 30
 Ser Ala Gln Glu His Pro
 35